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# Minorities in Higher Education: The Changing Southwest

## Arizona

A report prepared by the WICHE Information Clearinghouse in cooperation with the Western Regional Office of the College Board and with the support of the Atlantic Richfield Foundation

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Western Interstate Commission for Higher Education WICHE
The College Board

# WICHE

WICHE, the Western Interstate Commission for Higher Education, is a nonprofit regional organization. It helps the thirteen member states to work together to provide high-quality, cost-effective programs to meet the education and manpower needs of the West. Member states are Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming. Through its Information Clearinghouse, WICHE provides information to assist higher education and governmental policy makers in the West.

This series of reports includes the following publications:

**Minorities in Higher Education: The Changing Southwest (Arizona)**, publication no. 2A134a

**Minorities in Higher Education: The Changing Southwest (California)**, publication no. 2A134b

**Minorities in Higher Education: The Changing Southwest (Colorado)**, publication no. 2A134c

**Minorities in Higher Education: The Changing Southwest (New Mexico)**, publication no. 2A134d

**Minorities in Higher Education: The Changing Southwest (Texas)**, publication no. 2A134e

Graphics by Scott Knauer

Published December 1984
Western Interstate Commission for Higher Education
P.O. Drawer P
Boulder, Colorado 80302
Telephone: (303) 497-0200
An Affirmative Action/Equal Opportunity Employer
Publication Number 2A134a
Printed in the United States of America
35-100-540-000-401:7C:1284:ROB:2A134a

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# Foreword

Sometimes we may become aware of societal trends without recognizing their potential effects on our social institutions. At other times, we may fail to respond adequately to social changes, even though we are aware that they are taking place. Among the virtues of our society are both the tendency toward self-correction--to make adjustments in our social institutions so that they function effectively--and the tendency toward making adjustments that anticipate needed changes and that, in a sense, preempt the need for self-correction.

As data in this and companion reports show, the current levels of education and income achieved by racial and ethnic minorities fall below that of Whites. This imbalance in economic and educational attainment, plus the rapid growth in the population of racial and ethnic minority groups, raises important issues for education and government policy makers in each state. It is the intent of this report to help focus the discussion on these issues and to encourage appropriate responses.

WICHE is grateful to the organizations and individuals who have worked with us on this important project. The College Board cosponsored the study and provided assistance and advice at several stages. The Atlantic Richfield Foundation provided additional financial support. A regional advisory committee, whose members are listed on the following page, provided valuable assistance in preparing these reports and helped develop a strategy for disseminating the results of the study.

December 1984

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# Introduction

This series of state reports is intended to highlight the implications for educational planning of the changing demography of the Southwest. This project is the outgrowth of an earlier report, which was prepared to provide background data for a regional higher education conference on minority access and retention in higher education (Kaufman et al., 1983).

The decision to concentrate on minorities in higher education in the southwestern states follows from several conclusions that have been well documented.

- Certain racial and ethnic minorities have been underrepresented in higher education relative to nonminorities. This is especially true of Hispanic students, who are well represented, proportionally and numerically, in the population of these states.
- These minorities are even less well represented among college and professional school graduates.
- Increases in the proportion of racial and ethnic minorities among successive age cohorts present a challenge to educators and policy makers concerned with reversing these patterns of underrepresentation.

The reports focus on each of five southwestern states (Arizona, California, Colorado, New Mexico, and Texas) individually in order to call attention to the most important findings in each state.

As college-age populations in these five southwestern states grow in terms of both the numbers and percentages of ethnic minority individuals, policy makers will be faced with a number of serious educational and political questions. For example:

- Are current approaches to provision of educational opportunity--for all seeking it, regardless of ethnic background--sufficient, now and for the future?
- What are the implications for higher education and for institutions' program and resource "mix" of the growing minority share of the college-age population and the simultaneous decline (in some states) of the proportion of Whites in the same age groups?

- o What are the implications of the growth of these minority populations for the economies of the states and their supplies of highly trained manpower, given the current distribution of minority students throughout the educational system (by institutional level and type, for example)?
- o What are the implications for the higher education institutions of the current pattern of distribution of minority students, given the changes in the composition of the college-age group?
- o If the educational patterns of minority students remain unchanged as their numbers grow, what are the possible social and political consequences?

These questions are meant only to suggest the seriousness and complexity of policy issues that need attention. The hope of the organizations publishing the report is that its contents will be useful as these challenging questions are addressed.

## Definitions

The information in these reports comes primarily from two sources: the 1980 census of the population and related surveys by the United States Bureau of the Census provided population and demographic data, and the Higher Education General Information Survey (HEGIS) conducted by the National Center for Education Statistics (NCES) provided education data. Reference to these two sources ensures that there will be comparability in the data presented across states and that other users will have access to the same data sources.

Caution must be used when comparing the two data bases, however, because each source defines racial and ethnic groups differently, with particular impact on the "Hispanic" population group. The HEGIS format designates five racial or ethnic groups: American Indian, Black, Asian, Hispanic, and White. The Census Bureau uses the racial designations American Indian, Black, Asian, Other, and White, plus a further designation "Persons of Spanish Origin" and "Persons not of Spanish Origin," stating that persons of Spanish origin may be of any race. In this report, the Census Bureau data have been reconciled with the HEGIS data format, resulting in the following comparable groups:

| HEGIS | CENSUS |
|---|---|
| American Indian | American Indians, Eskimos, and Aleuts whether of Spanish origin or not |
| Black | Blacks not of Spanish origin |
| Asian | Asian and Pacific Islanders whether of Spanish origin or not |
| Hispanic | Persons of Spanish origin, regardless of race |
| White | White, not of Spanish origin |
| Residual | Total population minus the above (also Other races not of Spanish origin) |

While these breakdowns do not avoid all problems of comparability, they appear to work well for the purposes of this report. To keep the terminology short, in all cases Black and White refer to Black not-Hispanic and White not-Hispanic. Exhibits derived from census data refer to the category "Spanish origin," while exhibits derived from HEGIS data use the term "Hispanic" to identify essentially the same group.

It further must be recognized that the terms "Spanish origin" and "Hispanic" aggregate into one group several ethnic groups, e.g., Central American immigrants, Latinos, Mexican Americans, and others, which may vary from state to state. Each of these groups has its own demographic and cultural characteristics. Policy makers may wish to be aware of these different characteristics and of their implications for higher education.

The most recent and reliable data available were used in this report. In some cases more recent data were available, but older information was used because it was comparable with the data for earlier years whereas the newer data were not. Where the racial and ethnic composition of the college-age population is compared with the composition of the student population and the distribution of degrees among racial and ethnic groups (Exhibits 8A-8E and 9A-9E), HEGIS data from 1980 were used for the education information in order to compare them with census data from the same year.

# Summary

- Arizona's population is projected to be between 4.1 million and 4.8 million by the year 2000, up from 2.7 million in 1980, a twenty-year growth rate of between 52 and 78 percent. (See Exhibit 1.)

- Nearly four-fifths of the population growth from 1970 to 1980 can be accounted for by in-migration, which is projected to remain high. (See narrative for Exhibit 1.)

- People of Spanish origin accounted for 16.2 percent of the total population of Arizona in 1980, but they accounted for nearly 26 percent of the 0-4 age group. (See Exhibits 2 and 3.)

- By 2000, one-third of the age 0-4 population is projected to be of Spanish origin. (See Exhibit 3.)

- Blacks represented 2.7 percent of the total population in 1980, American Indians 5.6 percent, Asians 0.8 percent, and all others 0.1 percent. The American Indian population shows growth patterns similar to that of the Spanish-origin population. (See Exhibits 2 and 3.)

- Arizona has the nineteenth highest proportion of people aged 25 and older with college degrees. Whites far exceed minority groups in postsecondary educational attainment. (See Exhibit 4.)

- Data suggest that Hispanics and American Indians tend to have higher high school dropout rates than Blacks or Whites. The Hispanic and American Indian enrollments in twelfth grade in fall 1982 were only 68 and 63 percent respectively as large as the Hispanic and American Indian enrollments in ninth grade three years earlier, compared with 85 percent for White and Black enrollments. (See Exhibit 5.)

- Nationwide figures show that 83 percent of Whites (adults and school-age respondents to census surveys during the period from 1974 to 1978) completed high school compared with 72 percent of Blacks and 55 percent of American Indians and Hispanics. (See narrative for Exhibit 5.)

- National data indicate that smaller percentages of students from low-income families enroll in postsecondary education than students from medium- and high-income families. In Arizona, relatively high percentages of Spanish-origin, Black, and American Indian families earned less than $15,000 in 1979. (See Exhibits 6 and 7.)

- Present enrollment and earned degree patterns show serious underrepresentation (relative to their proportions in the college-age population--aged 20-29) of some minority groups at all levels of postsecondary education. (See Exhibits 8A-8E and 9A-9E.)

- Patterns of degrees awarded to minorities between 1976-77 and 1980-81 are markedly different from the overall pattern in Arizona. Each minority group has a unique pattern. (See Exhibit 10.)

- In summary, the greatest population growth in the next twenty years will take place among the minority populations, whose rates of postsecondary educational attainment and socioeconomic status have been low historically.

# Exhibit 1

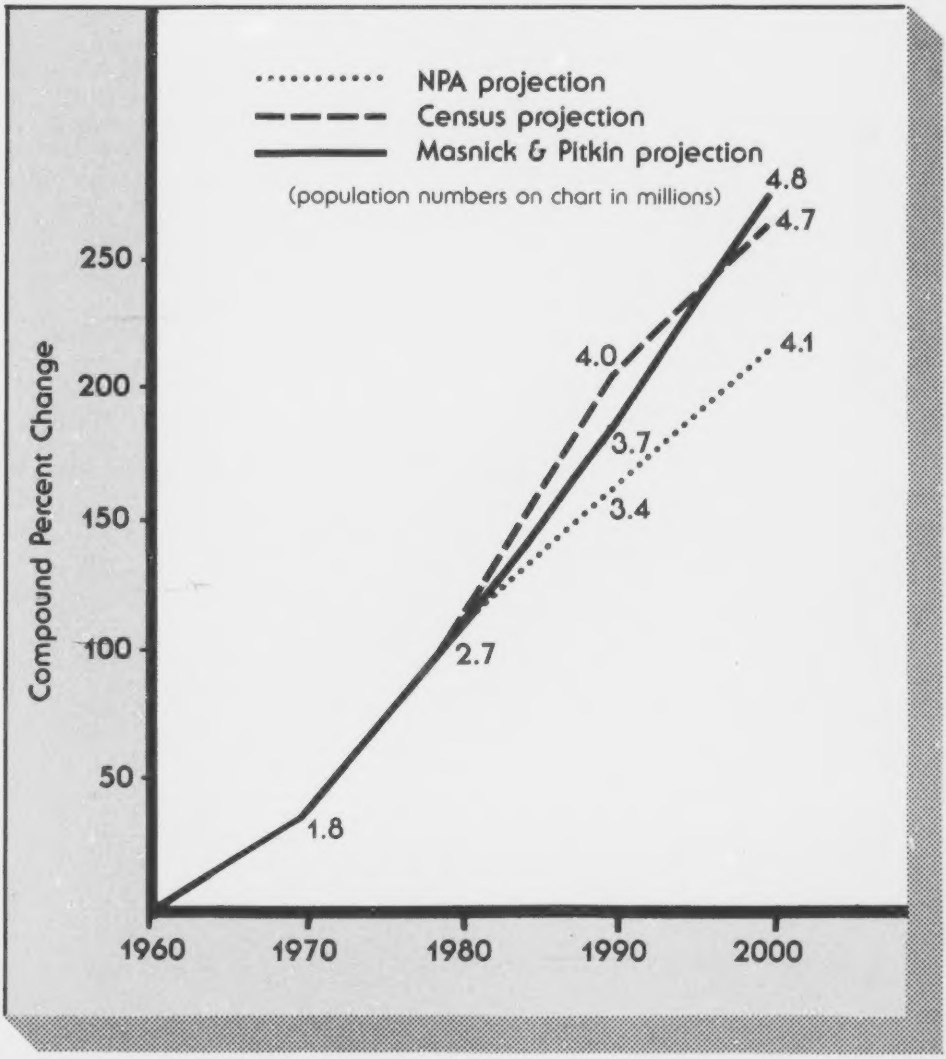
# Population Growth, 1960 to 1980, and Three Projections, 1990 to 2000

## —Arizona—

This exhibit shows the actual percentage growth in Arizona's population from 1960 to 1980. The dotted, dashed, and solid lines represent three different population projections for 1990 and 2000. These projections are based on mathematical calculations of trends evident today. They do not take into account economic or social factors that may cause the growth rate to accelerate or to slow.

- Arizona's population is projected to reach 4.1 million to 4.8 million by the year 2000, up from 2.7 million in 1980. The growth from 1980 to 1990 is estimated to be approximately 26 to 48 percent, and estimates of the overall change from 1980 to 2000 range from 52 to 78 percent.
- During the 1970s, Arizona was the second fastest growing state (proportionately) and added the fourth greatest number of inhabitants. The Bureau of the Census predicts that the state will be the third fastest growing state during the decade of the 1980s, and the National Planning Association predicts that Arizona will be the fastest growing state (Robey and Russell, 1983).
- Nearly four-fifths of the population growth from 1970 to 1980 can be attributed to in-migration (Masnick and Pitkin, 1982). Although many of the people migrating to Arizona are young adults, who have attained or are approaching those years in which they will be starting families, the state does have a significant in-migration of elderly persons.

## Exhibit 1
## Population Growth, 1960 to 1980, and Three Projections, 1990 to 2000
## —Arizona—



**Sources:** Robey and Russell, 1983; U.S. Bureau of the Census, 1970 and 1980; Masnick and Pitkin, 198

**Note:** The Masnick and Pitkin projections are plotted as found in their report. Projections for 2000 fro the National Planning Association and the Bureau of the Census are estimates calculated by regre sion analysis using actual population figures from the 1960, 1970, and 1980 censuses and the 19 projections.

# Exhibit 2
# Population by Race and Spanish Origin, 1980
## —Arizona—

Exhibit 2 presents the proportions of racial and ethnic groups in the 1980 population in Arizona. Since the data collected on race and Spanish origin in 1970 and 1980 are not comparable, it is not possible to make an accurate comparison between the two censuses.

- Arizona's largest minority group is the Spanish-origin population, 16.2 of the state's population. This is the fourth highest percentage of people of Spanish origin in the United States, and the 440,701 Spanish-origin inhabitants constitute the eighth largest Spanish-origin population in the nation (*American Demographics*, 1983).

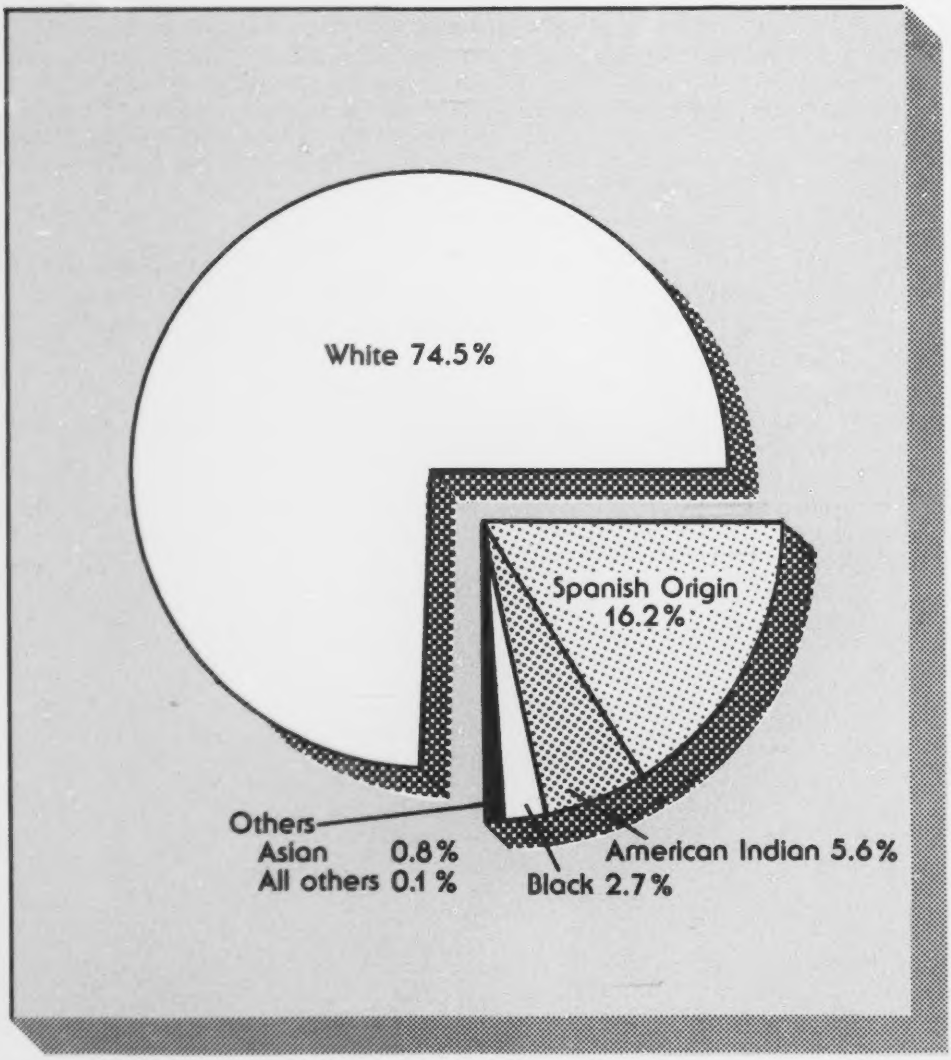
- Phoenix had the thirteenth largest metropolitan Spanish-origin population in the country in 1980, nearly 200,000. Tucson ranked twenty-sixth with more than 111,000. In percentage of Spanish-origin population, Tucson ranked twenty-sixth with 21 percent and Phoenix thirty-eighth with 13.2 percent (*American Demographics*, 1983).

- Blacks constitute 2.7 percent of Arizona's population, American Indians 5.6 percent, Asians 0.8 percent, all others 0.1 percent. Arizona's American Indian population is the third largest in the United States with more than 152,000 and is the second largest in proportion (Kaufman et al., 1983).

Exhibit 2

## Population by Race and Spanish Origin, 1980

## —Arizona—



**Source:** Kaufman et al., 1983, Table 21 and 23

# Exhibit 3

# School and College-Age Population by Race and Spanish Origin, 1980 (Actual) and 2000 (Projected)

## —Arizona—

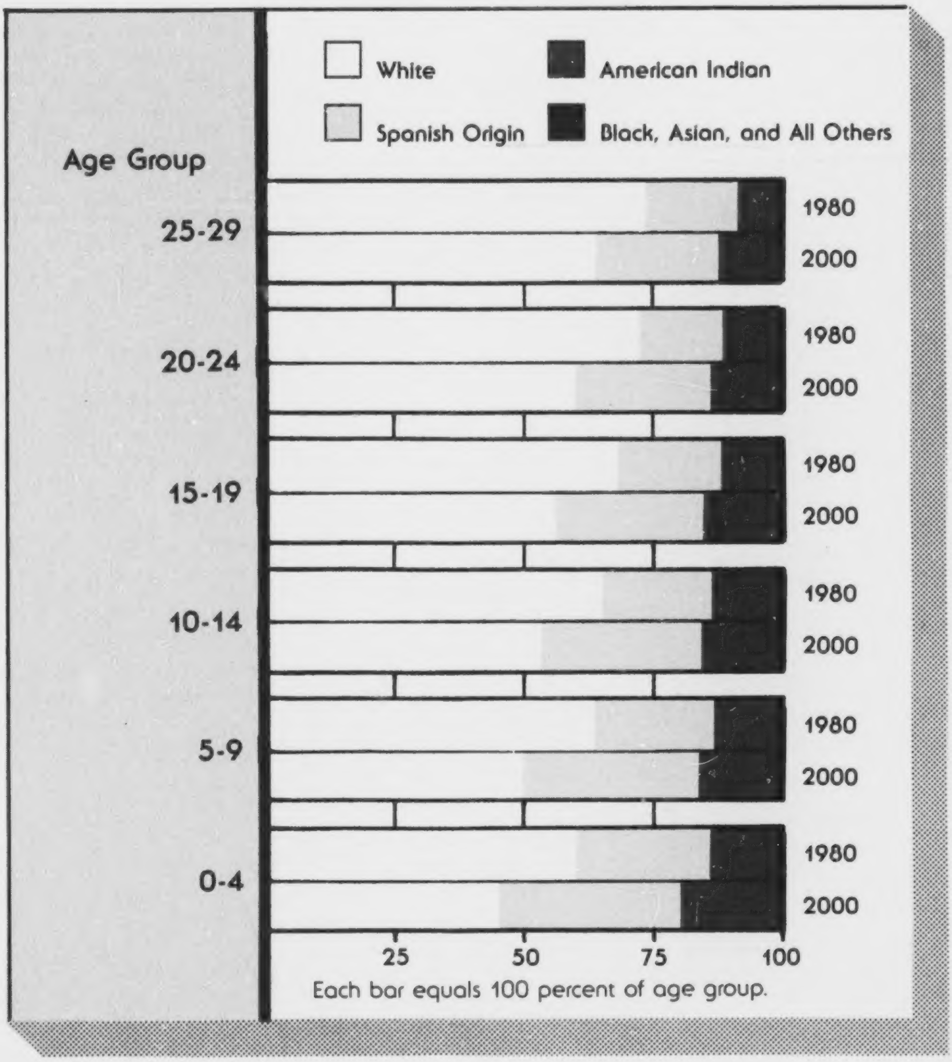
This exhibit shows the distribution of people of school age by race and Spanish origin for 1980 and a projection for the year 2000. The projection is based on a regression analysis of age cohorts from the 1980 census. Because the percentages of Blacks and Asians in Arizona are so small, they have been included in the All Others category in Exhibit 3. Blacks constitute between 3.0 and 3.4 percent of the population groups aged 0-29, and Asians constitute 0.8 to 1.1 percent of the same groups. The projections do not show any trends toward substantial increases among these racial groups between 1980 and 2000.

- Exhibit 3 shows that the Spanish-origin population tends to be highly concentrated in the younger age groups. Although people of Spanish origin constituted 16.2 percent of the total population of Arizona in 1980, they accounted for 25.6, 24, and 21.8 percent respectively of the three youngest age groups (ages 0-4, 5-9, and 10-14).

- By the year 2000, children of Spanish origin are projected to account for 33.2, 31.3, and 29.4 percent respectively of the three youngest age groups.

- While the numbers of Black, Asian, and American Indian children will not be as large as the Spanish-origin group, the percentages of racial minority children in the youngest age groups are expected to rise steadily. By the year 2000, it is estimated that approximately 13.2 percent of the children below age 15 in Arizona will be American Indians.

# Exhibit 3
## School and College-Age Population by Race and Spanish Origin, 1980 (Actual) and 2000 (Projected)
## —Arizona—



**Source:** Kaufman et al., 1983, Tables 20 and 22

**Note:** Blacks constitute between 3.0 and 3.3 percent of the state population of the various age groups, Asians between 0.8 and 1.1 percent, and others between 0.1 and 0.3 percent. There are no data to suggest that the Black and Asian proportions of the various age groups will increase between 1980 and 2000.

# Exhibit 4

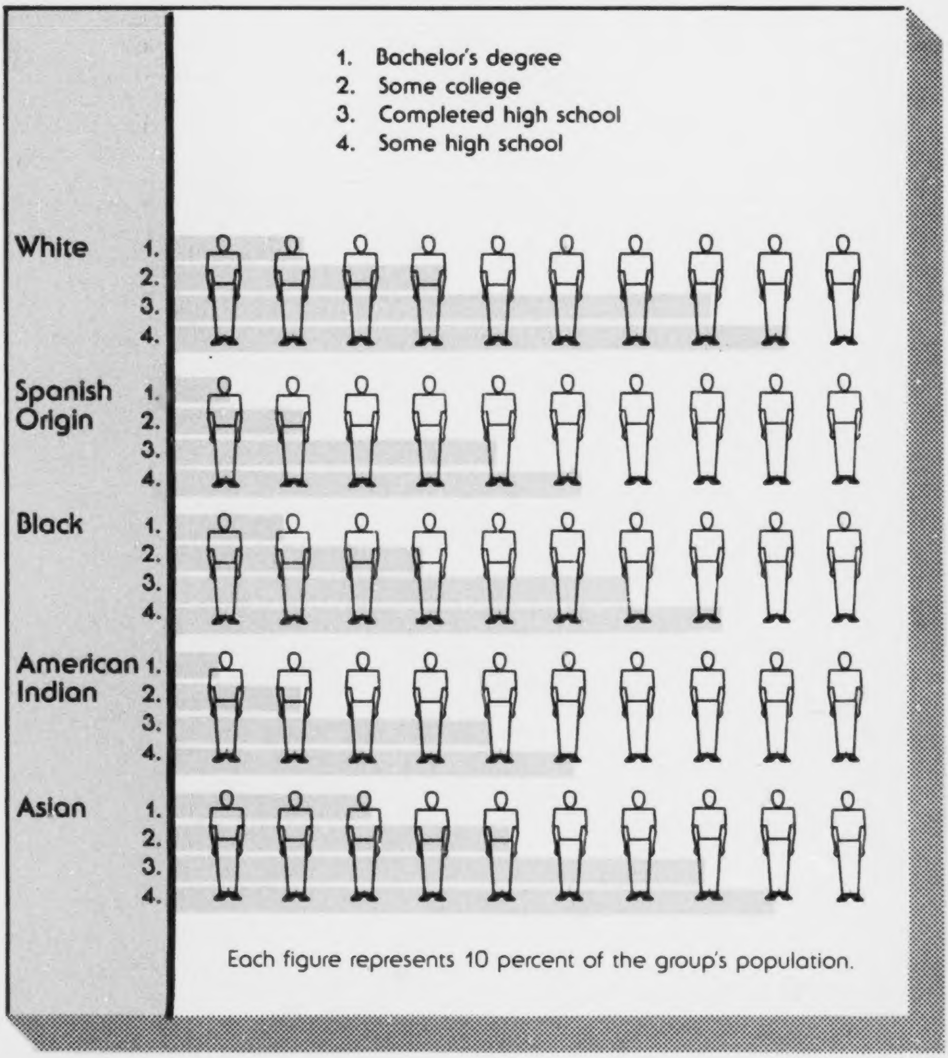
# Educational Attainment by Race and Spanish Origin of Persons Aged 25 and Over, 1980

## —Arizona—

Exhibit 4 shows the proportions of the population aged 25 and over that have completed various levels of education. As the levels of educational attainment rise, the proportions of the population reaching those levels decrease. The differences in attainment among racial and ethnic groups are striking. School attainment of Arizona adults in 1980 does not necessarily reflect what is taking place among the present generation of students in school, but the educational attainment of parents has been shown to affect the educational choices of their children.

- In 1980, Arizona had the nineteenth highest proportion in the nation (16.8 percent) of college graduates in its population aged 25 or older and the fourteenth highest percentage of high school graduates (72.4 percent) (American Demographics, 1982).
- Only 44 percent and 42 percent respectively of the Spanish-origin and American Indian population aged 25 and over had completed high school in 1980, compared with approximately three-quarters of Whites and Asians and more than 60 percent of the Blacks in the same age group.
- Approximately 40 percent of the White, 32 percent of the Black, and 47 percent of the Asian population had completed some college compared with 18 percent of the Spanish-origin and 17 percent of the American Indian population.
- The disparity in educational attainment is most striking at the bachelor's degree level or higher. For the White population, 19 percent had completed at least the baccalaureate degree, while 28 percent of the Asian population attained that level. Among the Black population, 11 percent had earned a bachelor's degree or more, while 4 percent of the American Indian and 6 percent of the Spanish-origin populations had completed at least a baccalaureate degree.

## Exhibit 4
## Educational Attainment by Race and Spanish Origin of Persons Aged 25 and Over, 1980
## —Arizona—



Each figure represents 10 percent of the group's population.

**Source:** Kaufman et al., 1983, Table AZ-4

# Exhibit 5

# Persistence in High School of Ninth Graders, Fall 1979 to Fall 1982 (Public Schools Only)

# —Arizona—

Exhibit 5 presents the percentage of fall 1979 ninth graders in Arizona public schools who were enrolled as tenth graders in fall 1980, eleventh graders in fall 1981, and twelfth graders in fall 1982. While these figures are not identical to rates of persistence for the various racial and ethnic groups through the start of the twelfth grade, they may serve as an indicator or a relative measure of persistence. The numbers of Asian students in Arizona are too small to imply persistence from the data.

- This exhibit implies that Hispanics and American Indians have higher dropout rates than Whites or Blacks and that these students appear to drop out earlier. While White and Black eleventh graders equaled approximately 89 percent of White and Black ninth grade enrollments two years earlier, Hispanic eleventh graders represented 79 percent of their ninth grade numbers and American Indians 69 percent.

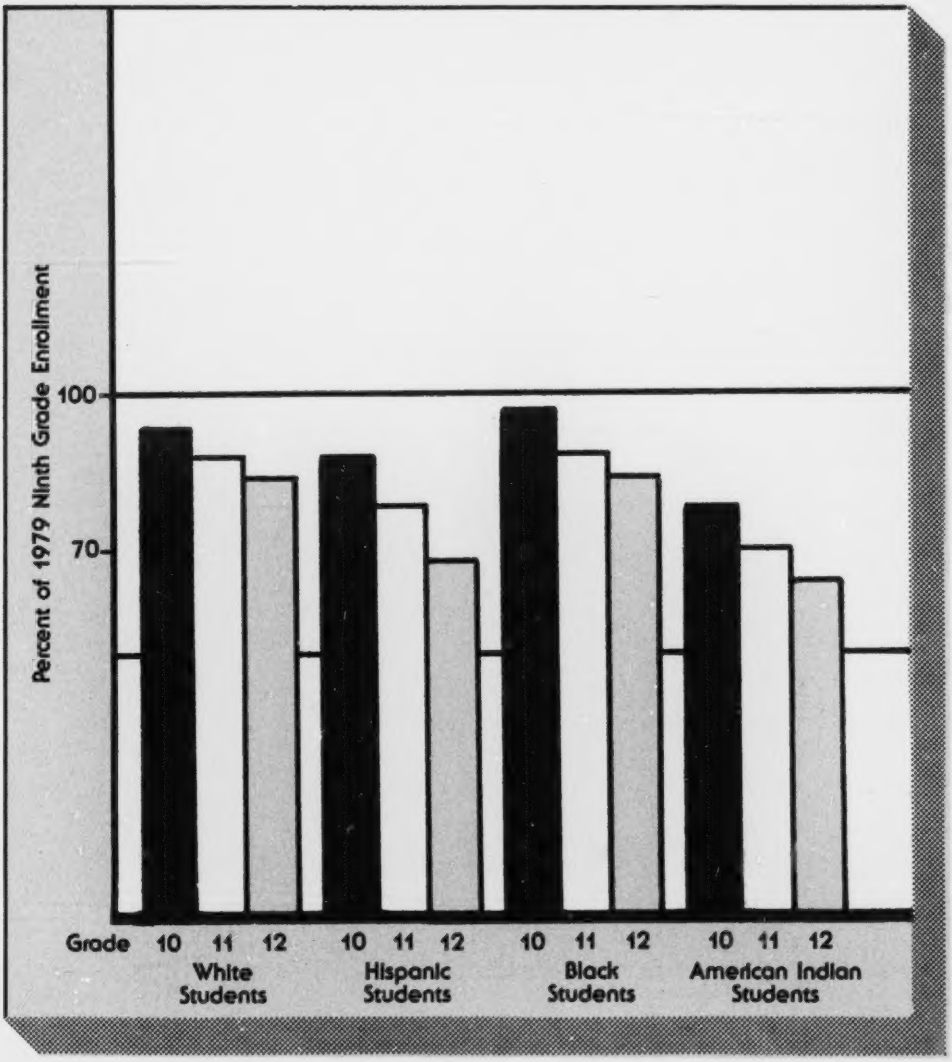
- The number of Hispanic high school seniors in 1982 represented 68 percent of the number of ninth graders three years earlier as opposed to 85 percent for Blacks and Whites. The figure for American Indians is 63 percent.

- Thus, it is clear that a sizeable part of Hispanic and American Indian youth, relative to others, do not complete high school and are thus not likely to enter college.

- In a nationwide study, which shows the "leakage" of minorities from the "educational pipeline," 83 percent of White adult and school-age respondents in the in the Current Population Surveys from 1974 to 1978 completed high school compared with 72 percent for Blacks and 55 percent for Hispanics and American Indians (Astin, 1982).

## Exhibit 5

### Persistence in High School of Ninth Graders, Fall 1979 to Fall 1982 (Public Schools Only) —Arizona—



**Source:** Western Interstate Commission for Higher Education, 1984

# Exhibit 6

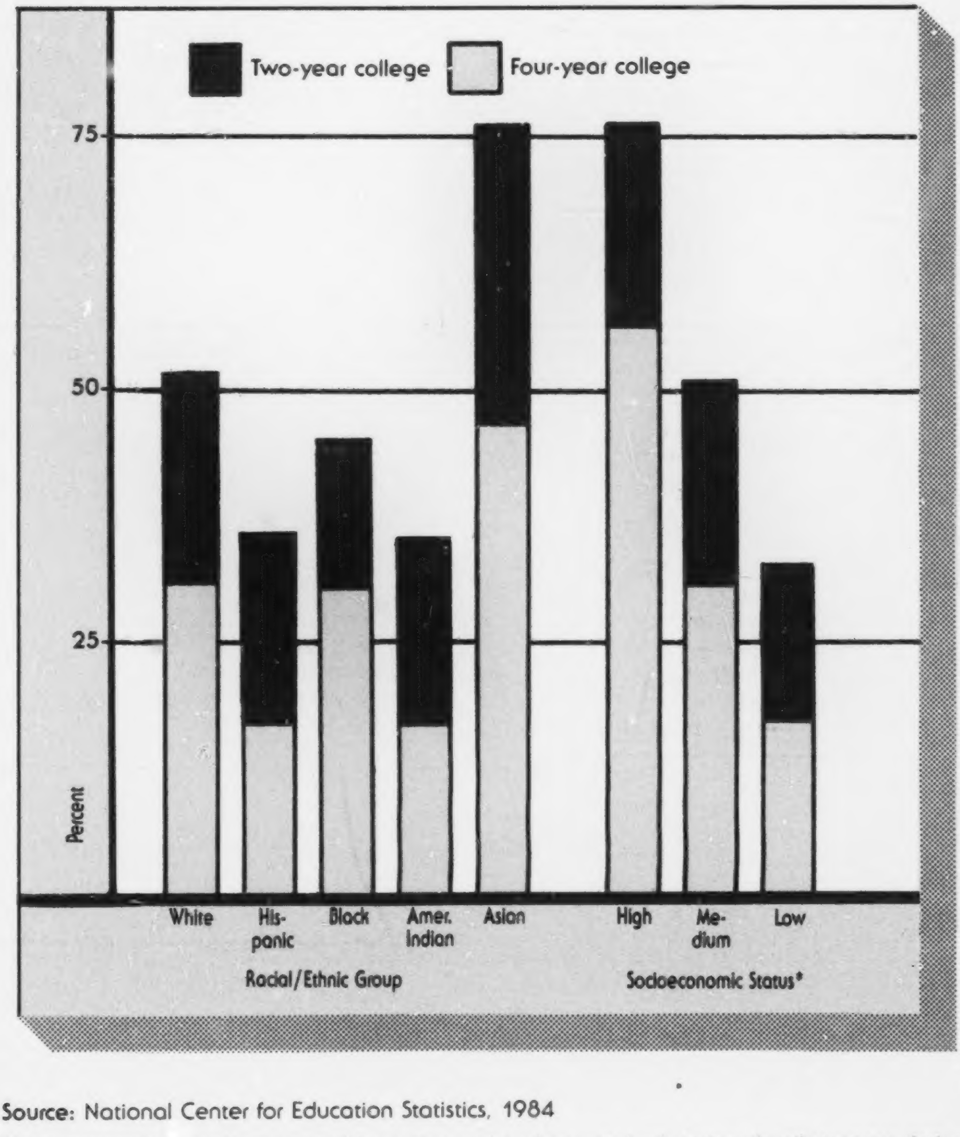
## Percentage of 1980 U.S. High School Seniors Subsequently Enrolled in College

Taken together, Exhibits 6 and 7 illustrate the relationships among race and/or ethnicity, family income, and college attendance. Exhibit 6 displays the results of a national survey relating to the percentage of 1980 high school graduates who enrolled in college during the next several years (these data were not available on a state-by-state basis). It should be recognized that this was a national survey with limited generalization to the population of specific states. The survey did show that attendance patterns in the West were different from other regions. Although approximately the same percentage of western high school seniors attended college as seniors from other regions of the country, a greater percentage of students from the West attended two-year colleges than students from the other regions (28 percent in the West compared with 14 percent in the Northeast and 16 percent in the North Central states and the South).

- The five bars on the left of the exhibit show the college attendance patterns for the racial and Spanish-origin groups. White and Black students attended four-year institutions in approximately the same proportions, but a greater proportion of Whites than Blacks attended two-year institutions, which accounts for the greater overall college-going rate for Whites. Compared with the other groups, American Indian and Spanish-origin students attended two-year colleges in relatively large proportions and four-year colleges in smaller proportions. Attendance at both two-year and four-year institutions by students of Asian ancestry was far greater than for any other group.

- Attendance patterns vary according to socioeconomic status (SES), which is measured by a composite of parental education, family income, father's occupation, and household characteristics. High SES students are more likely to attend postsecondary educational institutions at all levels than those with lower SES.

## Exhibit 6
## Percentage of 1980 U.S. High School Seniors Subsequently Enrolled in College



**Source:** National Center for Education Statistics, 1984

*Socioeconomic status is measured by a composite of parental education, family income, father's occupation, and household characteristics.

# Exhibit 7
# Family Income by Race and Spanish Origin, 1979
## —Arizona—

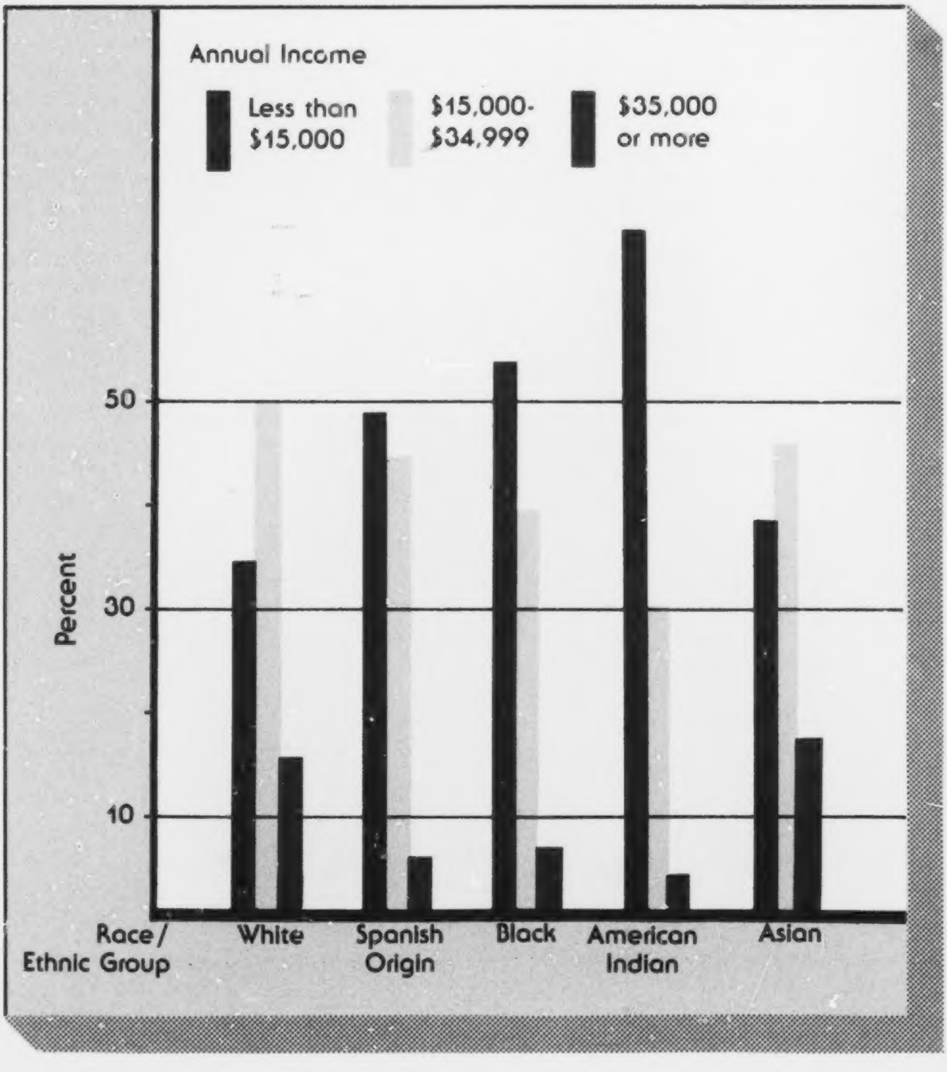
Exhibit 7 shows the percentages of the population with family incomes in three ranges: less than $15,000 per year; $15,000 to $34,999 per year; and $35,000 or more per year. The distribution for each racial or ethnic group is illustrated.

- About 54 percent of the Black, 48 percent of the Spanish-origin, and 66 percent of the American Indian populations come from families earning less than $15,000 per year, while only 4 to 7 percent of those groups come from families earning $35,000 or more.
- Family income levels for the White and Asian populations are similar: compared with the other racial or ethnic groups, relatively low percentages earn less than $15,000 and higher percentages earn more than $35,000.
- These figures, when combined with the general information on student attendance patterns presented in Exhibit 6, demonstrate the important connection between economic status and education.

## Exhibit 7

## Family Income by Race and Spanish Origin, 1979

## —Arizona—



**Source:** Kaufman et al., 1983, Table AZ-6

# Exhibits 8A-8E
## Postsecondary Enrollment
## Compared with Representation in the Population, 1980
## —Arizona—

Figures 8A-8E display the composition of postsecondary enrollments by race and ethnicity compared with each group's representation in the college-age population (aged 20-29). Each exhibit uses bars to portray the proportion of one racial or ethnic group enrolled in each of the four levels of postsecondary education. The bars are superimposed upon a background field representing that group's proportion of the college-age population. Thus, the reader can determine whether a group is well represented among postsecondary students in proportion to its representation in the population.

o The White proportion of enrollments at all levels of postsecondary education is greater than the White proportion of the college-age population in general. The White proportion of two-year college enrollment is substantially greater than the White share of the college-age population, and White representation increases at the four-year, graduate, and first professional levels.

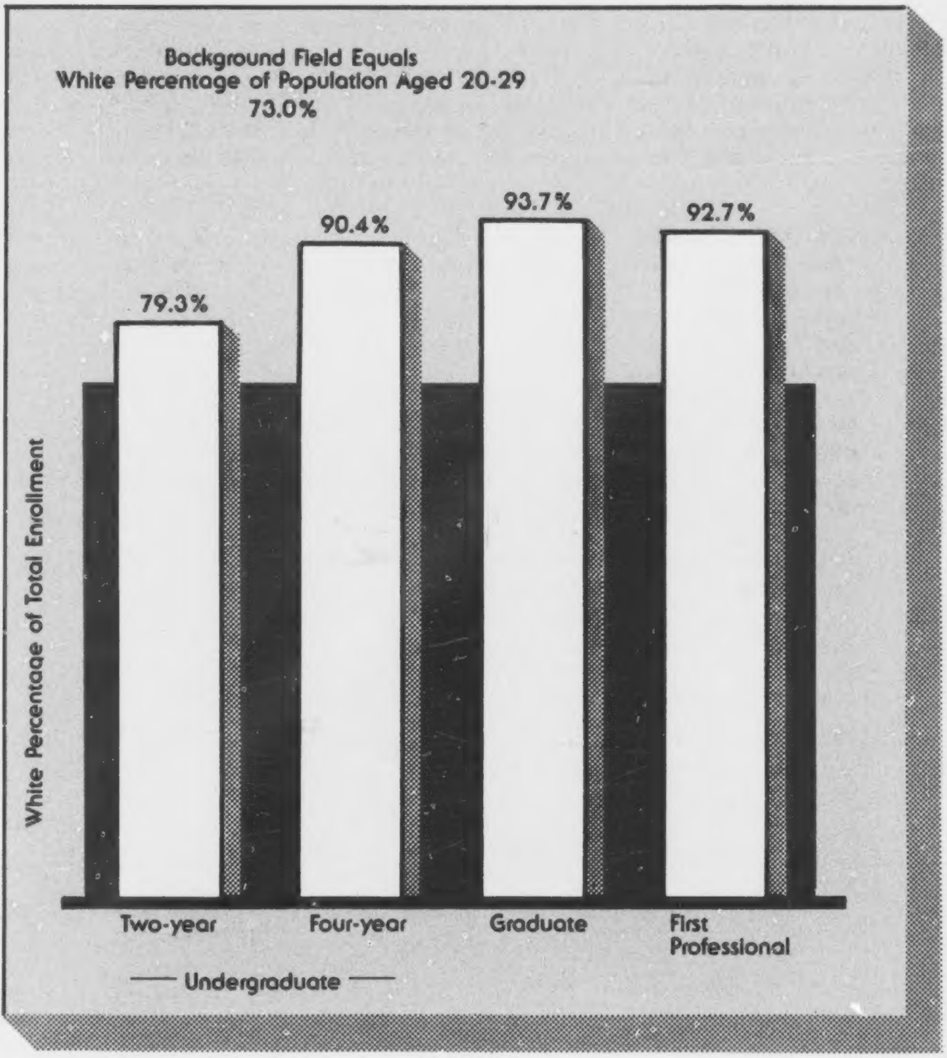
o Hispanics are substantially underrepresented at all levels of postsecondary education. Although Blacks and American Indians are well represented at the associate degree level, they are substantially underrepresented at all other levels.

o Asians are well represented at all levels of higher education, particularly at the associate and bachelor's levels.

## Exhibit 8A

## White Postsecondary Enrollments Compared with Representation in the Population, 1980

## —Arizona—

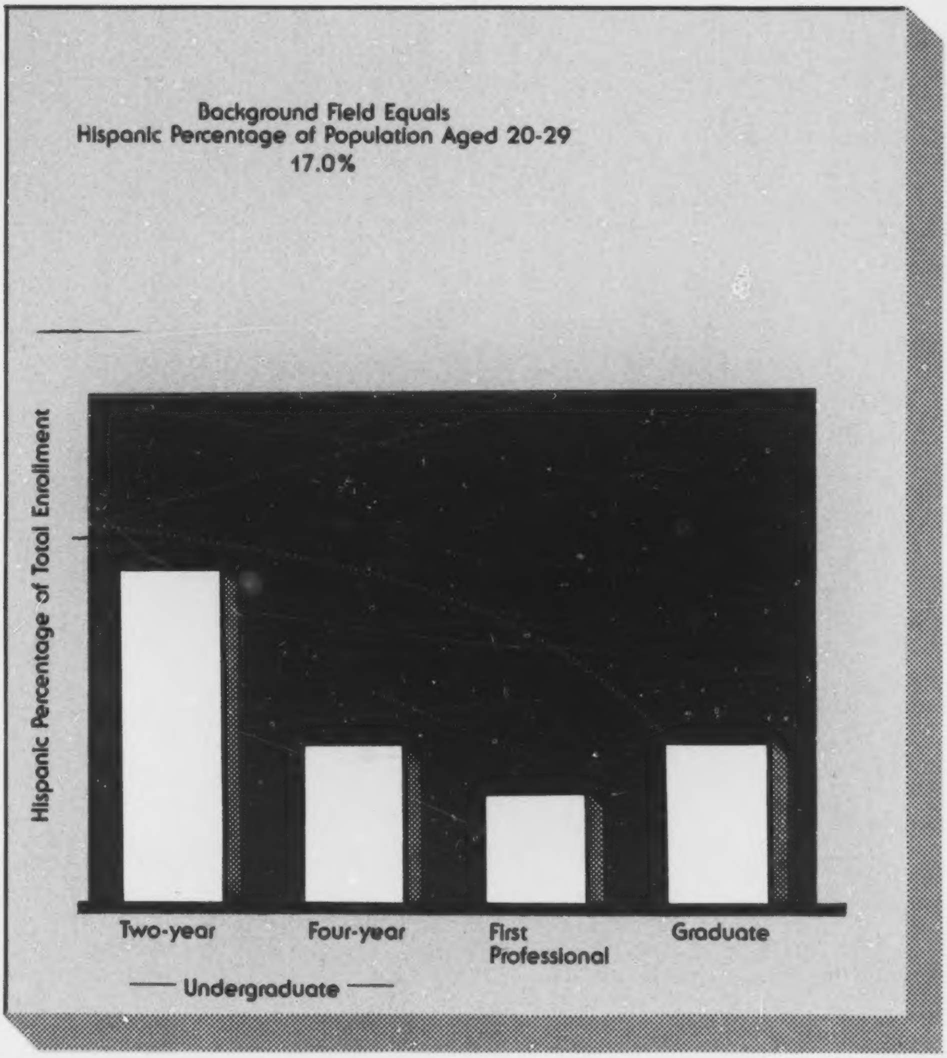


Source: Kaufman et al., 1983, Tables 7 and 22

## Exhibit 8B

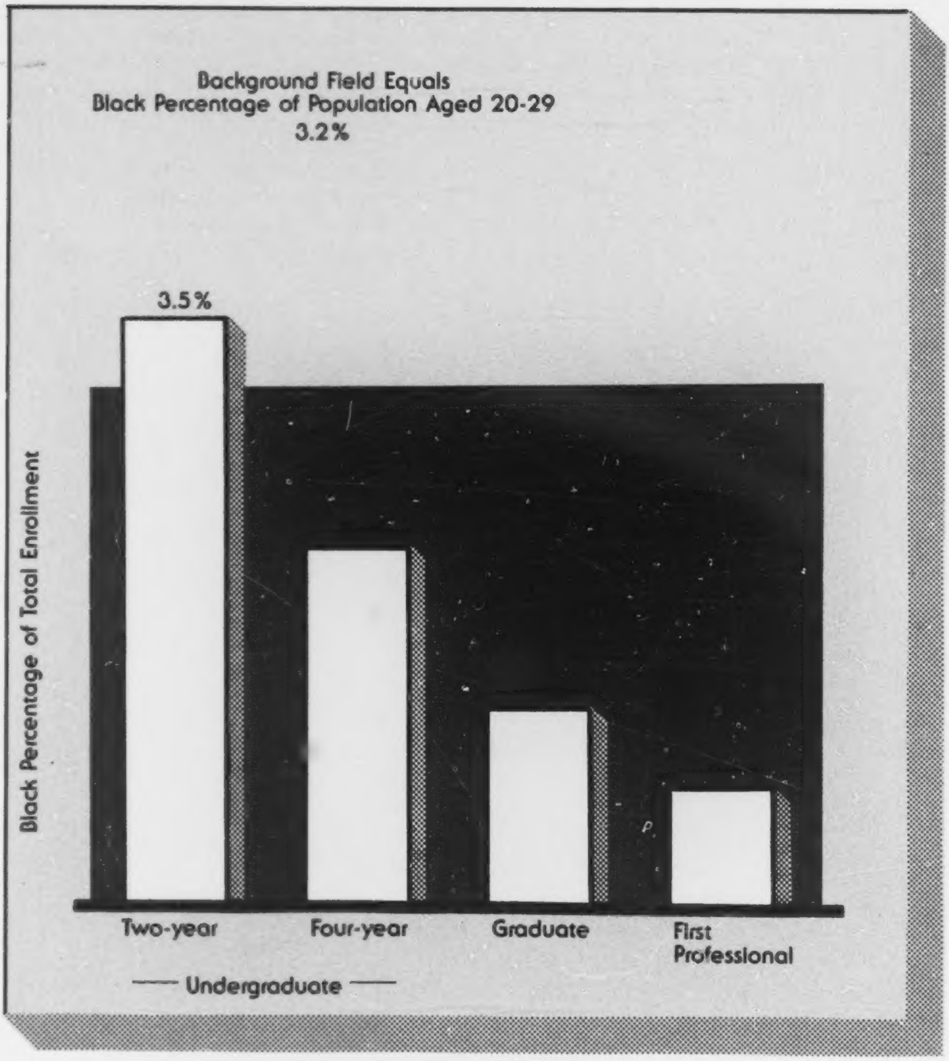
## Hispanic Postsecondary Enrollments Compared with Representation in the Population, 1980

## —Arizona—



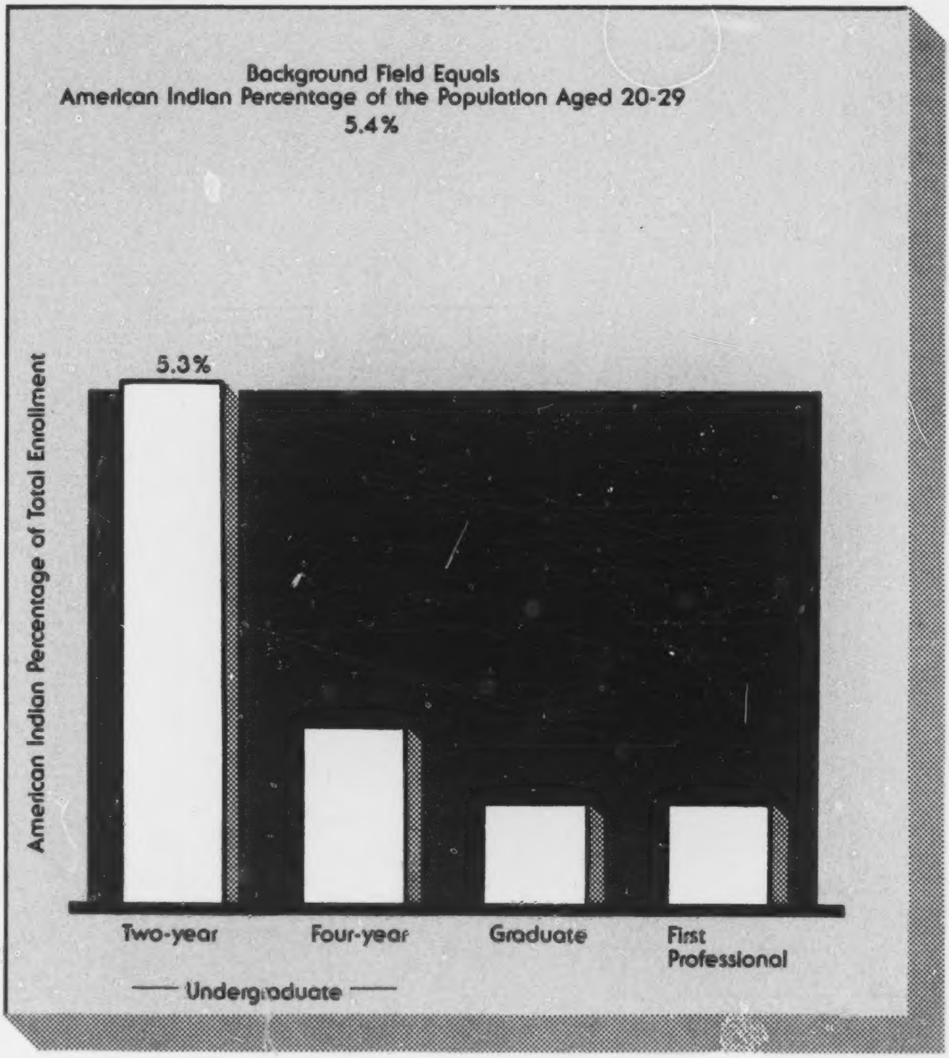
Source: Kaufman et al., 1983, Tables 7 and 22

# Exhibit 8C
# Black Postsecondary Enrollments Compared with Representation in the Population, 1980
## —Arizona—



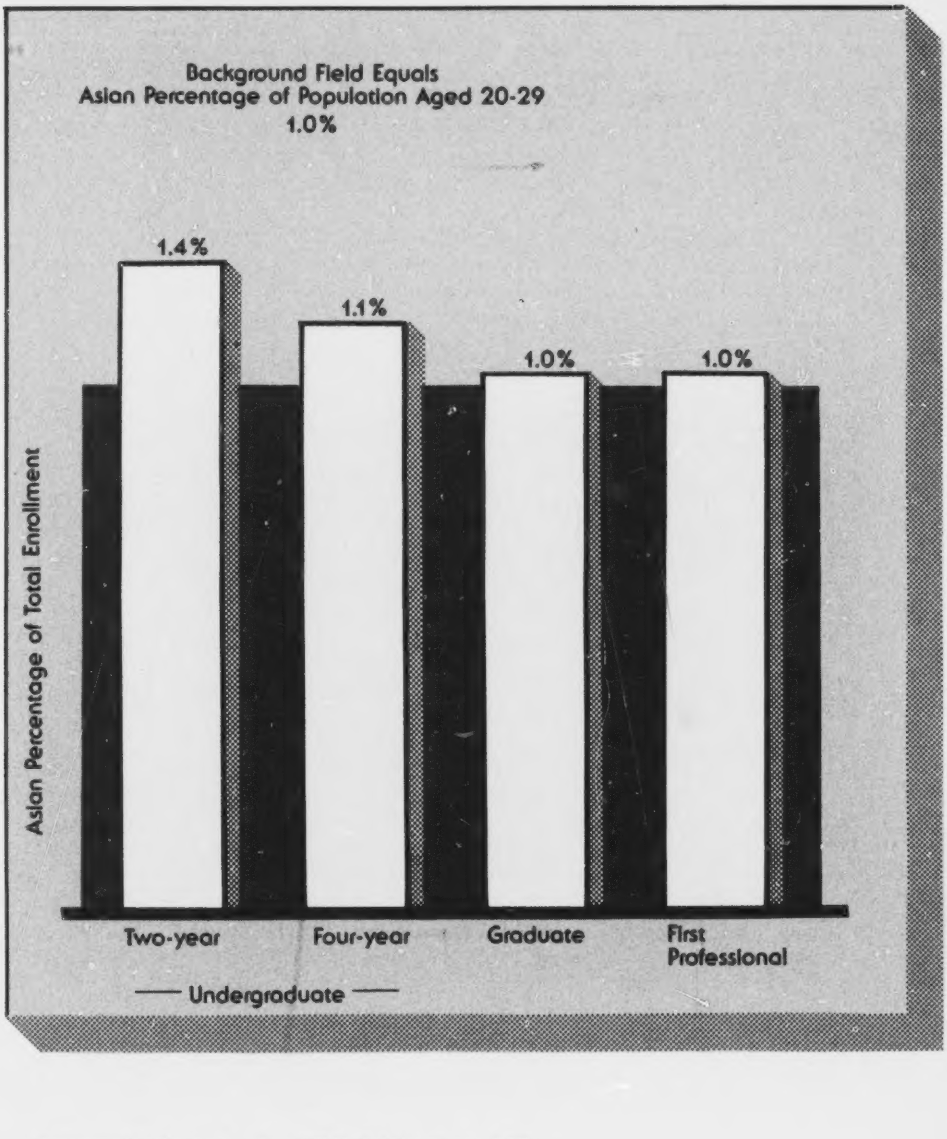
Source: Kaufman et al., 1983, Tables 7 and 22

Exhibit 8D
American Indian Postsecondary Enrollments
Compared with Representation in the Population, 1980
—Arizona—



Source: Kaufman et al., 1983, Tables 7 and 22

# Exhibit 8E
# Asian Postsecondary Enrollments Compared with Representation in the Population, 1980
# —Arizona—



Source: Kaufman et al., 1983, Tables 7 and 20

# Exhibits 9A-9E

## Degrees Earned in Arizona
## Compared with Representation in the Population, 1980

Figures 9A-9E display the distribution among racial and ethnic groups of earned degrees at five levels (associate, bachelor's, master's, doctoral, and first professional) with each group's representation in the college-age population (aged 20-29). Each exhibit uses bars to portray the proportion of earned degrees by one racial or ethnic group in each of the five levels of postsecondary education. The bars are superimposed upon a background field representing that group's proportion of the college-age population. Thus, the reader can determine whether a group is well represented in earned degrees in proportion to its representation in the population.

o In general, when the proportions of degrees awarded to members of minority groups are compared with the proportions of college-age population, the overall pattern of underrepresentation of minorities is similar to that in enrollments, especially at the baccalaureate and higher levels.

o The White proportion of those earning degrees at all levels of postsecondary education is substantially greater than the White proportion of the college-age population in general.

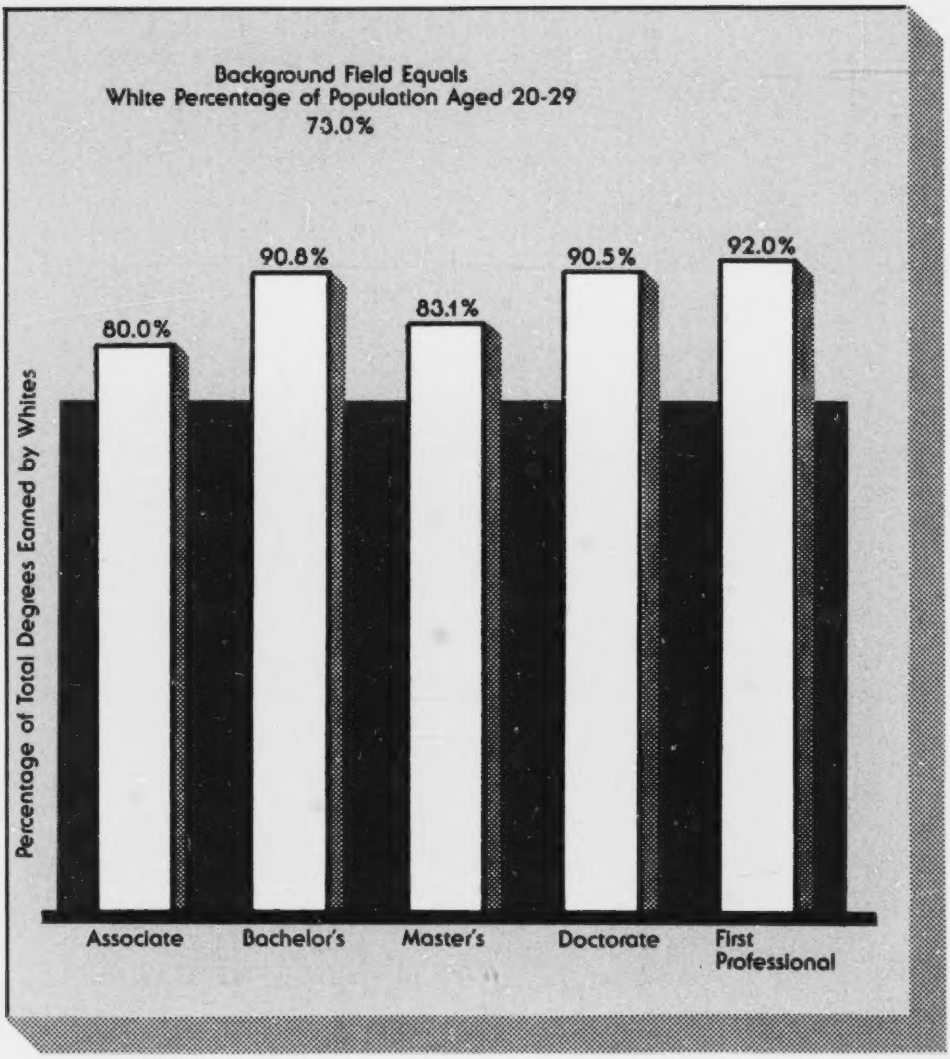
o Hispanics are underrepresented in earned degrees at all levels of postsecondary education. At the associate degree level, the proportion of degrees earned by Hispanic students is two-thirds the size of the Spanish-origin proportion of the college-age population in the state, and at the master's level, the Hispanic proportion is approximately 80 percent. At the other degree levels, the proportions of degrees earned by Hispanic students are approximately one-fourth as large as the Spanish-origin proportion of the college age-population.

o Blacks are also underrepresented at levels beyond the associate degree in Arizona. The Black proportion of associate degrees is larger than the Black proportion of the college-age population in Arizona. At the bachelor's level, the Black proportion is approximately one-half the size of the Black proportion of the state-wide college-age population, 65 percent the size at the master's level, and approximately one-quarter the size at the doctoral and first professional levels.

o American Indians are underrepresented at all levels of postsecondary education, most particularly beyond the associate level. At the bachelor's, master's, and doctoral levels, the American Indian proportion of degrees earned is approximately one-quarter the size of the American Indian proportion of the college-age population in the state, and approximately one-sixth the size at the first professional level.

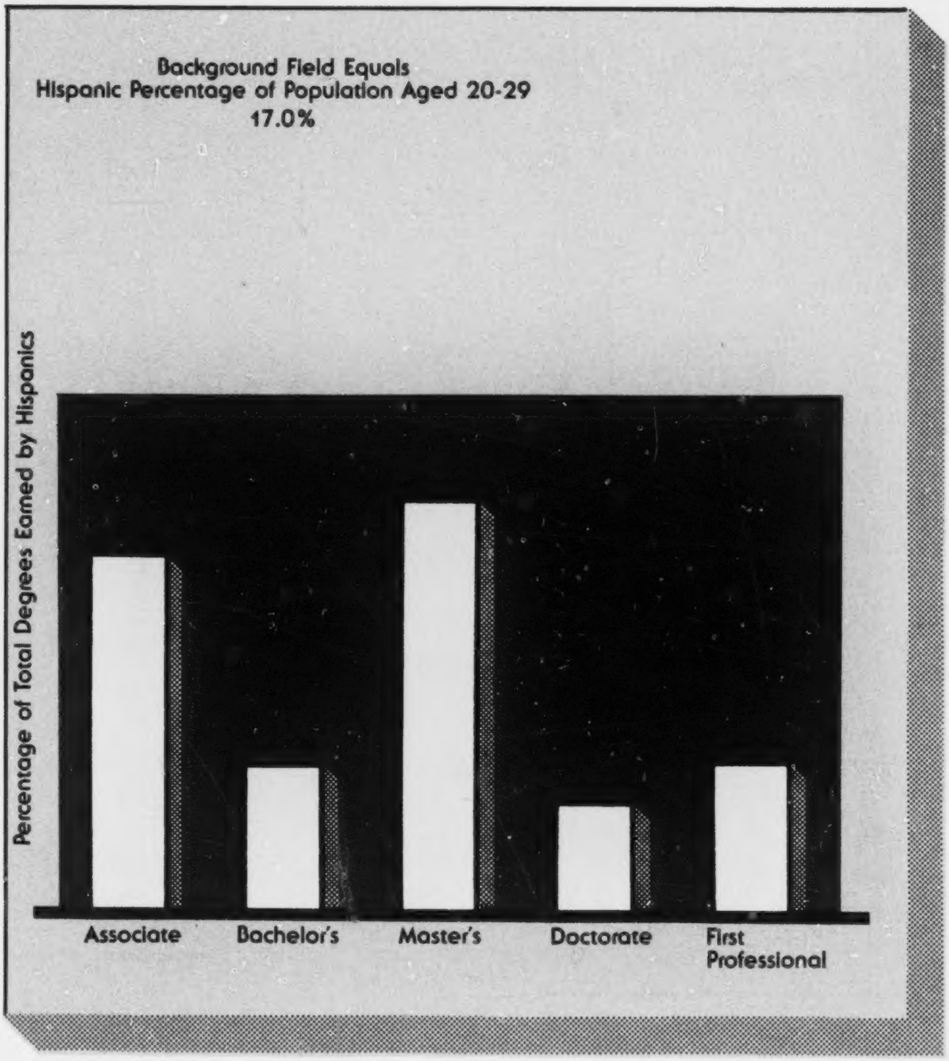
o Asians are well represented at all degree levels.

## Exhibit 9A
## Degrees Earned by Whites Compared with Representation in the Population, 1980
## —Arizona—



Source: Kaufman et al., 1983, Tables 12 and 22

# Exhibit 9B
# Degrees Earned by Hispanics Compared with Representation in the Population, 1980
## —Arizona—

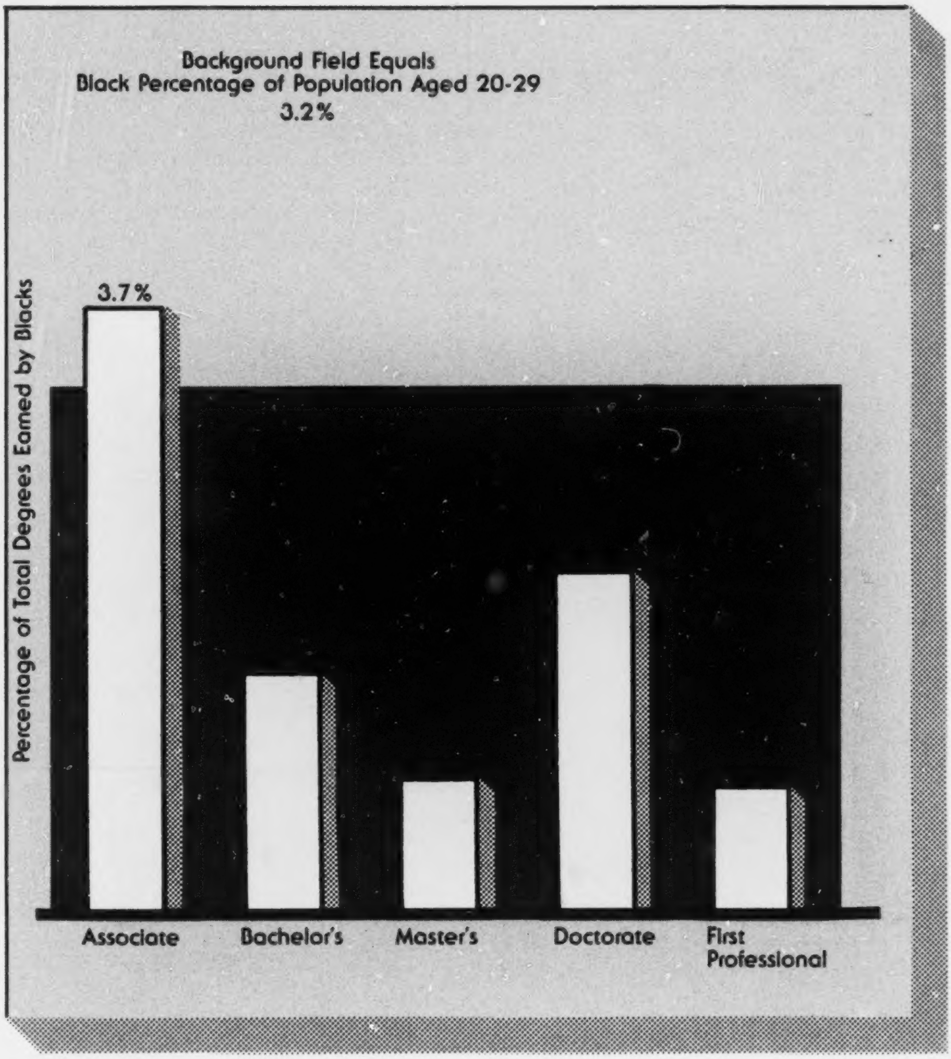


Source: Kaufman et al., 1983, Tables 12 and 22

## Exhibit 9C

## Degrees Earned by Blacks Compared with Representation in the Population, 1980

## —Arizona—

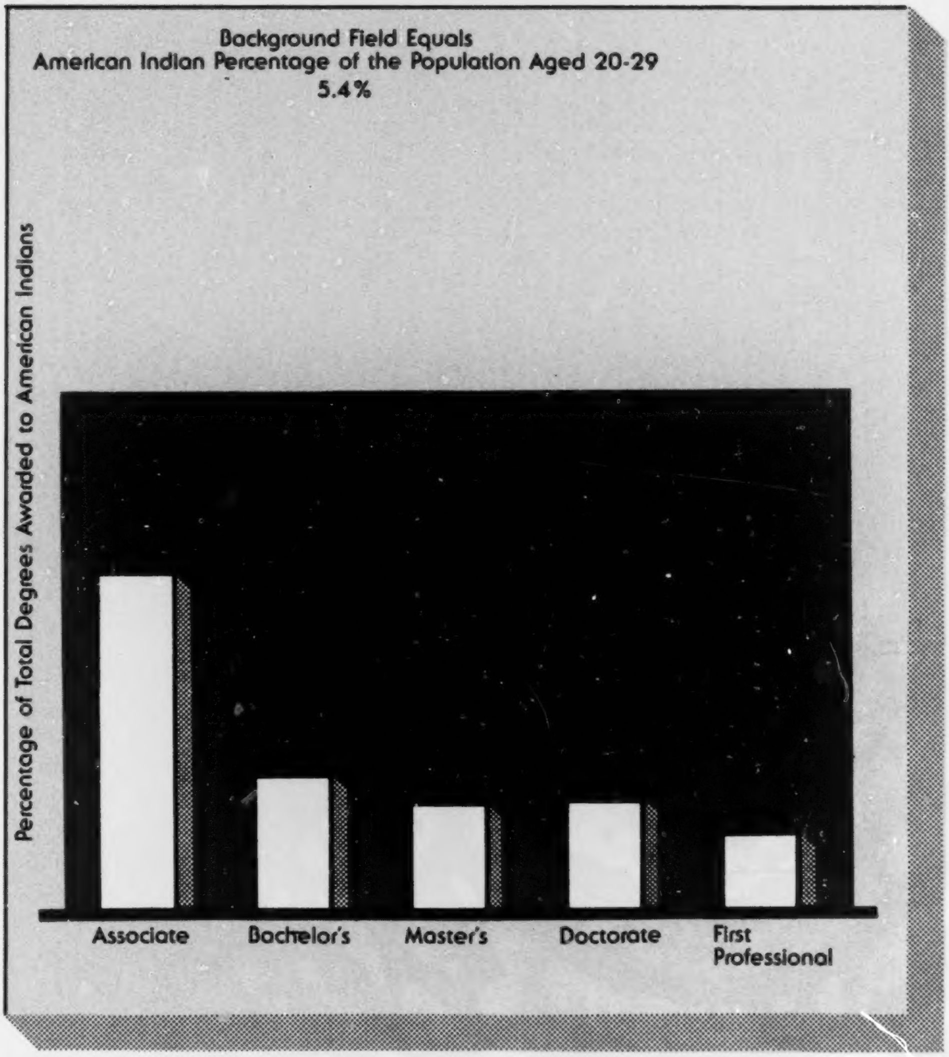


**Source:** Kaufman et al., 1983, Tables 12 and 22

## Exhibit 9D

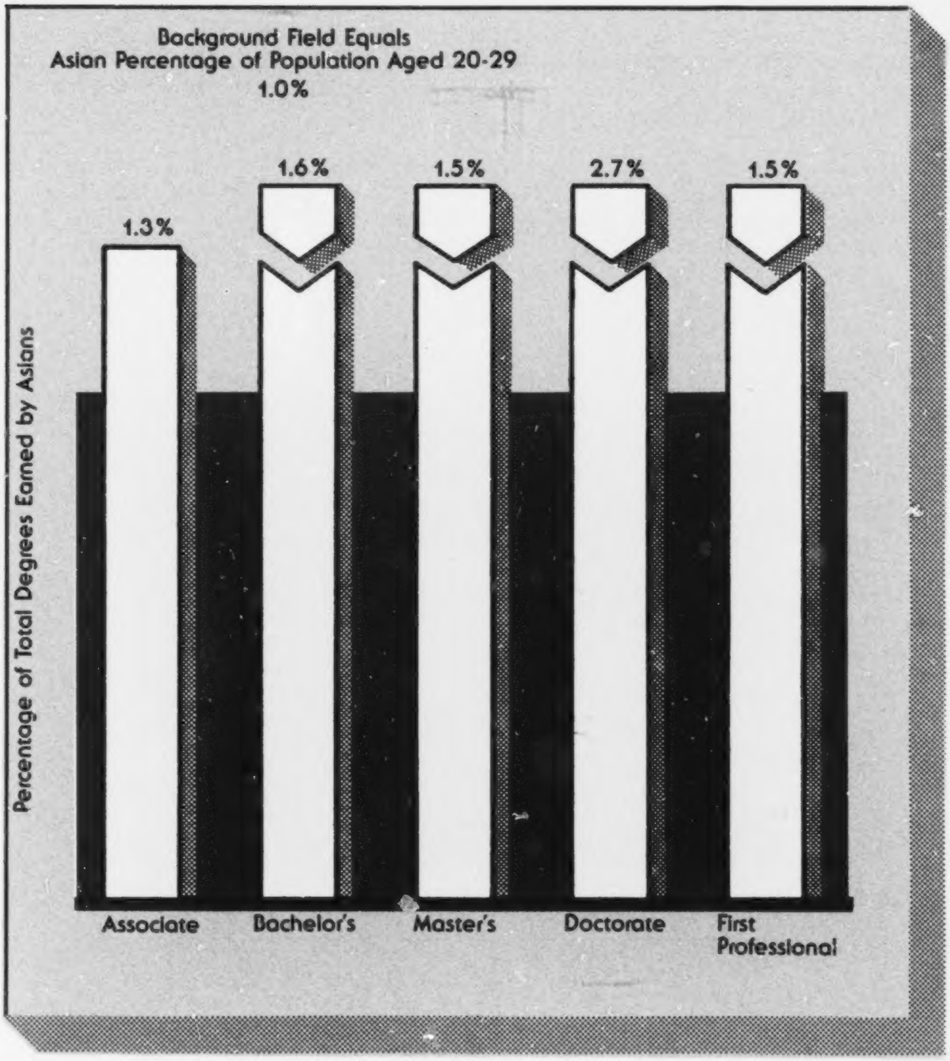
## Degrees Earned by American Indians Compared with Representation in the Population, 1980

## —Arizona—



Source: Kaufman et al., 1983, Tables 12 and 22

## Exhibit 9E
## Degrees Earned by Asians
## Compared with Representation in the Population, 1980
## —Arizona—



**Source:** Kaufman et al., 1983, Tables 12 and 20

Exhibit 10

## Earned Degrees by Race and Spanish Origin, 1976-77 to 1980-81

## —Arizona—

This table presents the number of degrees awarded at five levels (associate, bachelor's, master's, doctoral, and first professional) by racial or ethnic group. At the doctoral and first professional levels, interpretation is difficult because such small numbers of degrees are awarded to minority students that year-to-year fluctuations appear as substantial percentage changes.

- From 1976-77 to 1980-81, there have been substantial increases in the numbers of bachelor's and first professional degrees awarded, nearly 16 and 26 percent increase respectively. At the other levels there have not been dramatic changes over the same period.
- The number of bachelor's degrees earned by Hispanics has increased faster than the overall increase in bachelor's degrees awarded, and there has been a substantial increase at the doctoral level. Slight decreases at the associate and master's levels do not differ dramatically from the overall patterns. At the first professional degree level, the increase in degrees earned by Hispanics is smaller than the overall increase in first professional degrees awarded.
- Black students earned more associate and bachelor's degrees in 1980-81 than in 1976-77 but fewer master's and doctoral degrees.
- American Indians earned substantially more associate degrees, slightly more bachelor's degrees, and slightly fewer master's degrees in 1980-81 than in 1976-77.
- In 1980-81, Asian students earned substantially more associate, bachelor's, and doctoral degrees than they did in 1976-77.

## Exhibit 10

# Earned Degrees by Race and Spanish Origin, 1976-77 to 1980-81

## —Arizona—

| | Degrees Awarded 1976-77 | Degrees Awarded 1978-79 | Percent Change 1976-78 | Degrees Awarded 1980-81 | Percent Change 1978-80 | Percent Change 1976-80 |
|---|---|---|---|---|---|---|
| **State Totals** | | | | | | |
| Associate | 5,304 | 5,357 | 1.0 | 4,355 | -3.3 | -0.2 |
| Bachelor's | 9,354 | 9,905 | 5.9 | 10,826 | 9.3 | 15.7 |
| Master's | 4,327 | 3,940 | -8.9 | 4,350 | 10.4 | 6.2 |
| Doctorate | 417 | 392 | -6.0 | 392 | 0 | -6.0 |
| First Professional | 319 | 349 | 9.4 | 401 | 14.9 | 25.7 |
| **White Students** | | | | | | |
| Associate | 4,304 | 4,273 | -0.7 | 4,078 | -4.6 | -5.3 |
| Bachelor's | 8,530 | 8,944 | 4.9 | 9,610 | 7.4 | 12.7 |
| Master's | 3,779 | 3,385 | -10.4 | 3,304 | -2.4 | -12.6 |
| Doctorate | 362 | 326 | -9.9 | 304 | -6.7 | -16.0 |
| First Professional | 291 | 332 | 14.1 | 369 | 11.1 | 26.8 |
| **Hispanic Students** | | | | | | |
| Associate | 602 | 629 | 4.5 | 586 | -6.8 | -2.7 |
| Bachelor's | 393 | 494 | 25.7 | 497 | 0.6 | 26.5 |
| Master's | 140 | 152 | 8.6 | 134 | -11.8 | -4.3 |
| Doctorate | 9 | 16 | 77.8 | 12 | -25.0 | 33.3 |
| First Professional | 19 | 11 | -42.1 | 20 | 81.8 | 5.3 |
| **Black Students** | | | | | | |
| Associate | 171 | 177 | 3.5 | 189 | 6.8 | 10.5 |
| Bachelor's | 88 | 121 | 37.5 | 157 | 29.8 | 78.4 |
| Master's | 49 | 40 | -18.4 | 32 | -20.0 | -34.7 |
| Doctorate | 12 | 9 | -25.0 | 7 | -22.2 | -41.7 |
| First Professional | 0 | 1 | N/A | 3 | 200.0 | N/A |
| **American Indian Students** | | | | | | |
| Associate | 157 | 175 | 11.5 | 180 | 2.9 | 14.6 |
| Bachelor's | 137 | 117 | -14.6 | 149 | 27.4 | 8.8 |
| Master's | 49 | 28 | -42.9 | 48 | 71.4 | -2.0 |
| Doctorate | 2 | 2 | 0 | 4 | 100.0 | 100.0 |
| First Professional | 1 | 0 | N/A | 3 | N/A | 200.0 |
| **Asian Students** | | | | | | |
| Associate | 57 | 65 | 14.0 | 65 | 0 | 14.0 |
| Bachelor's | 103 | 126 | 22.3 | 171 | 35.7 | 66.0 |
| Master's | 56 | 90 | 60.7 | 58 | -35.6 | 3.6 |
| Doctorate | 5 | 7 | 40.0 | 9 | 28.6 | 80.6 |
| First Professional | 6 | 2 | -66.7 | 6 | 200.0 | 0 |

**Source:** Office for Civil Rights, 1979 and 1981.

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6.2

# Minorities in Higher Education: The Changing Southwest

## California

A report prepared by the WICHE Information Clearinghouse in cooperation with the Western Regional Office of the College Board and with the support of the Atlantic Richfield Foundation

Geoffrey Dolman, Jr.
Norman S. Kaufman

Western Interstate Commission for Higher Education WICHE
The College Board

# WICHE

WICHE, the Western Interstate Commission for Higher Education, is a nonprofit regional organization. It helps the thirteen member states to work together to provide high-quality, cost-effective programs to meet the education and manpower needs of the West. Member states are Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming. Through its Information Clearinghouse, WICHE provides information to assist higher education and governmental policy makers in the West.

This series of reports includes the following publications:

**Minorities in Higher Education: The Changing Southwest (Arizona)**, publication no. 2A134a

**Minorities in Higher Education: The Changing Southwest (California)**, publication no. 2A134b

**Minorities in Higher Education: The Changing Southwest (Colorado)**, publication no. 2A134c

**Minorities in Higher Education: The Changing Southwest (New Mexico)**, publication no. 2A134d

**Minorities in Higher Education: The Changing Southwest (Texas)**, publication no. 2A134e

Graphics by Scott Knauer

Published December 1984
Western Interstate Commission for Higher Education
P.O. Drawer P
Boulder, Colorado 80302
Telephone: (303) 497-0200
An Affirmative Action/Equal Opportunity Employer
Publication Number 2A134b
Printed in the United States of America
35-100-540-000-401:6C:1284:ROB:2A134b

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# Foreword

Sometimes we may become aware of societal trends without recognizing their potential effects on our social institutions. At other times, we may fail to respond adequately to social changes, even though we are aware that they are taking place. Among the virtues of our society are both the tendency toward self-correction--to make adjustments in our social institutions so that they function effectively—and the tendency toward making adjustments that anticipate needed changes and that, in a sense, preempt the need for self-correction.

As data in this and companion reports show, the current levels of education and income achieved by racial and ethnic minorities fall below that of Whites. This imbalance in economic and educational attainment, plus the rapid growth in the population of racial and ethnic minority groups, raises important issues for education and government policy makers in each state. It is the intent of this report to help focus the discussion on these issues and to encourage appropriate responses.

WICHE is grateful to the organizations and individuals who have worked with us on this important project. The College Board cosponsored the study and provided assistance and advice at several stages. The Atlantic Richfield Foundation provided additional financial support. A regional advisory committee, whose members are listed on the following page, provided valuable assistance in preparing these reports and helped develop a strategy for disseminating the results of the study.

December 1984

Phillip Sirotkin
Executive Director
Western Interstate Commission
for Higher Education

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# Introduction

This series of state reports is intended to highlight the implications for educational planning of the changing demography of the Southwest. This project is the outgrowth of an earlier report, which was prepared to provide background data for a regional higher education conference on minority access and retention in higher education (Kaufman et al., 1983).

The decision to concentrate on minorities in higher education in the southwestern states follows from several conclusions that have been well documented.

- Certain racial and ethnic minorities have been underrepresented in higher education relative to nonminorities. This is especially true of Hispanic students, who are well represented, proportionally and numerically, in the population of these states.
- These minorities are even less well represented among college and professional school graduates.
- Increases in the proportion of racial and ethnic minorities among successive age cohorts present a challenge to educators and policy makers concerned with reversing these patterns of underrepresentation.

The reports focus on each of five southwestern states (Arizona, California, Colorado, New Mexico, and Texas) individually in order to call attention to the most important findings in each state.

As college-age populations in these five southwestern states grow in terms of both the numbers and percentages of ethnic minority individuals, policy makers will be faced with a number of serious educational and political questions. For example:

- Are current approaches to provision of educational opportunity--for all seeking it, regardless of ethnic background--sufficient, now and for the future?
- What are the implications for higher education and for institutions' program and resource "mix" of the growing minority share of the college-age population and the simultaneous decline (in some states) of the proportion of Whites in the same age groups?

- What are the implications of the growth of these minority populations for the economies of the states and their supplies of highly trained manpower, given the current distribution of minority students throughout the educational system (by institutional level and type, for example)?
- What are the implications for the higher education institutions of the current pattern of distribution of minority students, given the changes in the composition of the college-age group?
- If the educational patterns of minority students remain unchanged as their numbers grow, what are the possible social and political consequences?

These questions are meant only to suggest the seriousness and complexity of policy issues that need attention. The hope of the organizations publishing the report is that its contents will be useful as these challenging questions are addressed.

## Definitions

The information in these reports comes primarily from two sources: the 1980 census of the population and related surveys by the United States Bureau of the Census provided population and demographic data, and the Higher Education General Information Survey (HEGIS) conducted by the National Center for Education Statistics (NCES) provided education data. Reference to these two sources ensures that there will be comparability in the data presented across states and that other users will have access to the same data sources.

Caution must be used when comparing the two data bases, however, because each source defines racial and ethnic groups differently, with particular impact on the "Hispanic" population group. The HEGIS format designates five racial or ethnic groups: American Indian, Black, Asian, Hispanic, and White. The Census Bureau uses the racial designations American Indian, Black, Asian, Other, and White, plus a further designation "Persons of Spanish Origin" and "Persons not of Spanish Origin," stating that persons of Spanish origin may be of any race. In this report, the Census Bureau data have been reconciled with the HEGIS data format, resulting in the following comparable groups:

| HEGIS | CENSUS |
|---|---|
| American Indian | American Indians, Eskimos, and Aleuts whether of Spanish origin or not |
| Black | Blacks not of Spanish origin |
| Asian | Asian and Pacific Islanders whether of Spanish origin or not |
| Hispanic | Persons of Spanish origin, regardless of race |
| White | White, not of Spanish origin |
| Residual | Total population minus the above (also Other races not of Spanish origin) |

While these breakdowns do not avoid all problems of comparability, they appear to work well for the purposes of this report. To keep the terminology short, in all cases Black and White refer to Black not-Hispanic and White not-Hispanic. Exhibits derived from census data refer to the category "Spanish origin," while exhibits derived from HEGIS data use the term "Hispanic" to identify essentially the same group.

It further must be recognized that the terms "Spanish origin" and "Hispanic" aggregate into one group several ethnic groups, e.g., Central American immigrants, Latinos, Mexican Americans, and others, which may vary from state to state. Each of these groups has its own demographic and cultural characteristics. Policy makers may wish to be aware of these different characteristics and of their implications for higher education.

The most recent and reliable data available were used in this report. In some cases more recent data were available, but older information was used because it was comparable with the data for earlier years whereas the newer data were not. Where the racial and ethnic composition of the college-age population is compared with the composition of the student population and the distribution of degrees among racial and ethnic groups (Exhibits 8A-8E and 9A-9E), HEGIS data from 1980 were used for the education information in order to compare them with census data from the same year.

# Summary

- California's population is projected to be between 30.1 million and 31.5 million by the year 2000, up from 23.7 million in 1980, a twenty-year growth rate of between 27 and 33 percent. (See Exhibit 1.)
- More than 56 percent of the population growth from 1970 to 1980 can be accounted for by in-migration, which is projected to remain high. (See narrative for Exhibit 1.)
- People of Spanish origin accounted for 19.2 percent of the total population of California in 1980, but they accounted for 32 percent of the 0-4 age group. (See Exhibits 2 and 3.)
- By 2000, 40 percent of the age 0-4 population is projected to be of Spanish origin. (See Exhibit 3.)
- Blacks represented 7.5 percent of the total population in 1980, American Indians 0.9 percent, Asians 5.3 percent, and all others 0.5 percent. The state's Black population is the second largest in the United States, and the American Indian and Asian are the nation's largest. (See Exhibits 2 and 3.)
- California has the seventh highest proportion of people aged 25 and older with college degrees. Whites far exceed most minority groups in postsecondary educational attainment. (See Exhibit 4.)
- Nationwide figures show that 83 percent of Whites (adults and school-age respondents to census surveys during the period from 1974 to 1978) completed high school compared with 72 percent of Blacks and 55 percent of American Indians and Hispanics. State-level data for California are not available. (See narrative for Exhibit 4.)
- National data suggest that smaller percentages of students from low-income families enroll in postsecondary education than students from medium- and high-income families. In California, relatively high percentages of Spanish-origin, Black, and American Indian families earned less than $15,000 in 1979. (See Exhibits 5 and 6.)
- Present enrollment and earned degree patterns show considerable underrepresentation (relative to their proportions in the college-age population--aged 20-29) for Hispanics, Blacks, and American Indians at most levels of postsecondary education. Asians are generally well represented. (See Exhibits 7A-7E and 8A-8E.)
- Patterns of degrees awarded to minorities from 1976-77 to 1980-81 are markedly different from the overall pattern in California. Each minority group has a unique pattern. (See Exhibit 9.)
- In summary, the greatest population growth in the next twenty years will take place among the minority populations, whose rates of postsecondary educational attainment and socioeconomic status have been low historically.

# Exhibit 1

# Population Growth, 1960 to 1980, and Four Projections, 1990 to 2000

# —California—

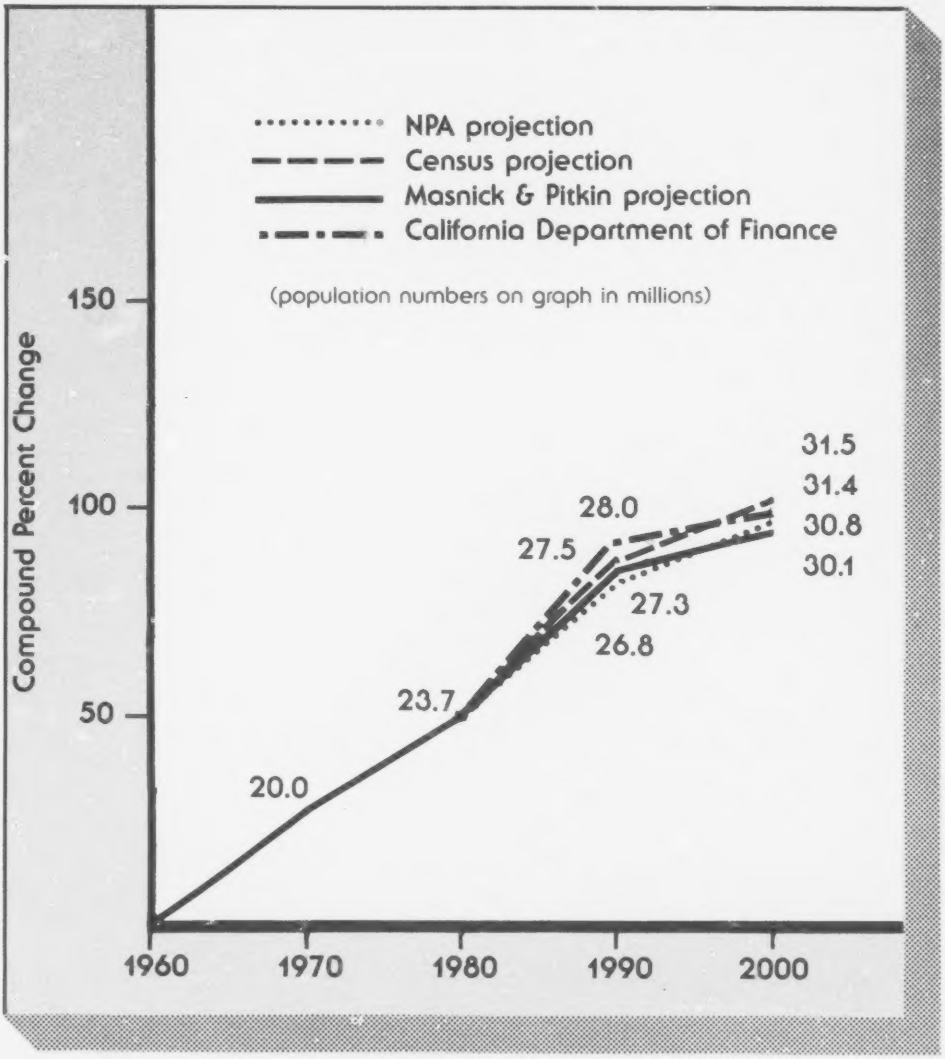
This exhibit shows the actual percentage growth in California's population from 1960 to 1980. The dotted, dashed, and solid lines represent four different population projections for 1990 and 2000. These projections are based on mathematical calculations of trends evident today. They do not take into account economic or social factors that may cause the growth rate to accelerate or to slow.

- California's population is projected to reach 30.1 million to 31.5 million by the year 2000, up from 23.7 million in 1980. The growth from 1980 to 1990 is estimated to be approximately 13 to 18 percent, and estimates of the overall change from 1980 to 2000 range from 27 to 33 percent.
- During the 1970s, California added 3.7 million to its population--the largest numerical gain in the country. California's huge population base prevents a large percentage increase in population from occurring during the next decade, but projections indicate that the state may experience faster proportional growth than 30 to 35 of the other states during the 1980s (Robey and Russell, 1983).
- More than 56 percent of the population growth from 1970 to 1980 can be attributed to in-migration and the other 44 percent to natural growth (Masnick and Pitkin, 1982). Many of the people migrating to California are young adults, who have attained or are approaching those years in which they will be starting families.

## Exhibit 1

## Population Growth, 1960 to 1980, and Four Projections, 1990 to 2000

## —California—



**Sources:** Robey and Russell, 1983; U.S. Bureau of the Census, 1970 and 1980; Masnick and Pitkin, 1982; California Postsecondary Education Commission, 1984.

**Note:** The Masnick and Pitkin and the California Department of Finance projections are plotted as reported. Projections for 2000 from the National Planning Association and the Bureau of the Census are estimates calculated by regression analysis using actual population figures from the 1960, 1970, and 1980 censuses and the 1990 projections.

# Exhibit 2
## Population by Race and Spanish Origin, 1980
## —California—

Exhibit 2 presents the proportions of racial and ethnic groups in the 1980 population in California. Since the data collected on race and Spanish origin in 1970 and 1980 are not comparable, it is not possible to make an accurate comparison between the two censuses.

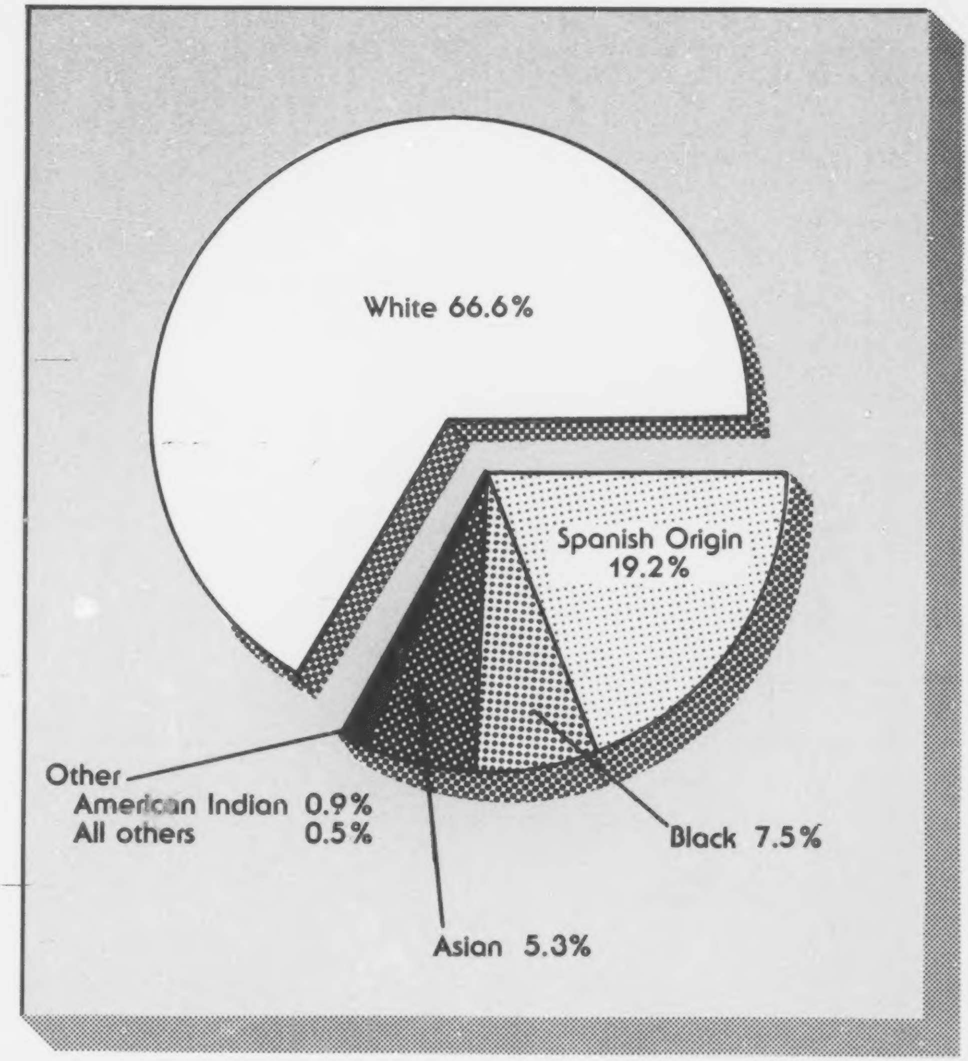
- California's largest minority group is the Spanish-origin population, the largest among the United States at more than 4.5 million in 1980. Slightly more than 19 percent of the population considers itself to be of Spanish origin, the third highest percentage among the states (American Demographics, 1983).

- Los Angeles had the largest metropolitan Spanish-origin population in the country in 1980, with more than 2 million. Other California metropolitan areas with large numbers of Spanish-origin inhabitants are Riverside-San Bernardino with nearly 290,000 (ranked eighth), Anaheim-Santa Ana with almost 286,000 (ninth), San Diego with more than 274,000 (tenth), San Jose with more than 226,000 (twelfth), Oakland with almost 186,000 (fourteenth), San Francisco with more than 166,000 (sixteenth), Fresno with more than 150,000 (twenty-first), Oxnard-Ventura with more than 113,000 (twenty-fifth), Sacramento with more than 105,000 (twenty-seventh), Bakersfield with more than 75,000 (thirty-fourth), Salinas-Seaside-Monterey with almost 75,000 (thirty-sixth), Visalia-Tulare-Porterville with more than 73,000 (thirty-seventh), Stockton with nearly 67,000 (fortieth), and Santa Barbara with more than 55,000 (forty-first). Nineteen of the top fifty metropolitan areas in proportion of Spanish origin population are in California, ranging from Visalia-Tulare-Porterville with 29.8 percent Spanish-origin population (ranked twelfth) to Sacramento with 9.6 percent of Spanish origin (forty-eighth) (American Demographics, 1983).

- Blacks constitute 7.5 percent of California's population, American Indians 0.9 percent, Asians 5.3 percent, all others 0.5 percent (Kaufman et al., 1983). Since California is such a populous state, however, these groups represent comparatively large numbers. The state's Black population is the second largest in the nation at 1.8 million, the Asian population is the largest (more than 1.2 million) and the second highest in proportion, and the American Indian population is the largest with more than 200,000 (U.S. Bureau of the Census, 1981).

- Four metropolitan areas in California have large Black populations, Los Angeles-Long Beach (943,000) ranks third in size in the nation, Oakland (almost 264,000) is eighteenth, San Francisco (more than 127,000) is thirty-eighth, and San Diego (more than 104,000) is forty-seventh (American Demographics, 1983).

## Exhibit 2
## Population by Race and Spanish Origin, 1980
## —California—



**Source:** Kaufman et al., 1983, Table 21 and 23

# Exhibit 3

## School and College-Age Population by Race and Spanish Origin, 1980 (Actual) and 2000 (Projected)

## —California—

This exhibit shows the distribution of people of school age by race and Spanish origin for 1980 and a projection for the year 2000. The projection is based on a regression analysis of age cohorts from the 1980 census. Because the percentage of American Indians in California is so small, it has been included in the All Others category in Exhibit 3. American Indians constitute between 0.9 to 1.1 percent of the population groups aged 0-29. The projections do not show any trends toward substantial increases among this racial group between 1980 and 2000.

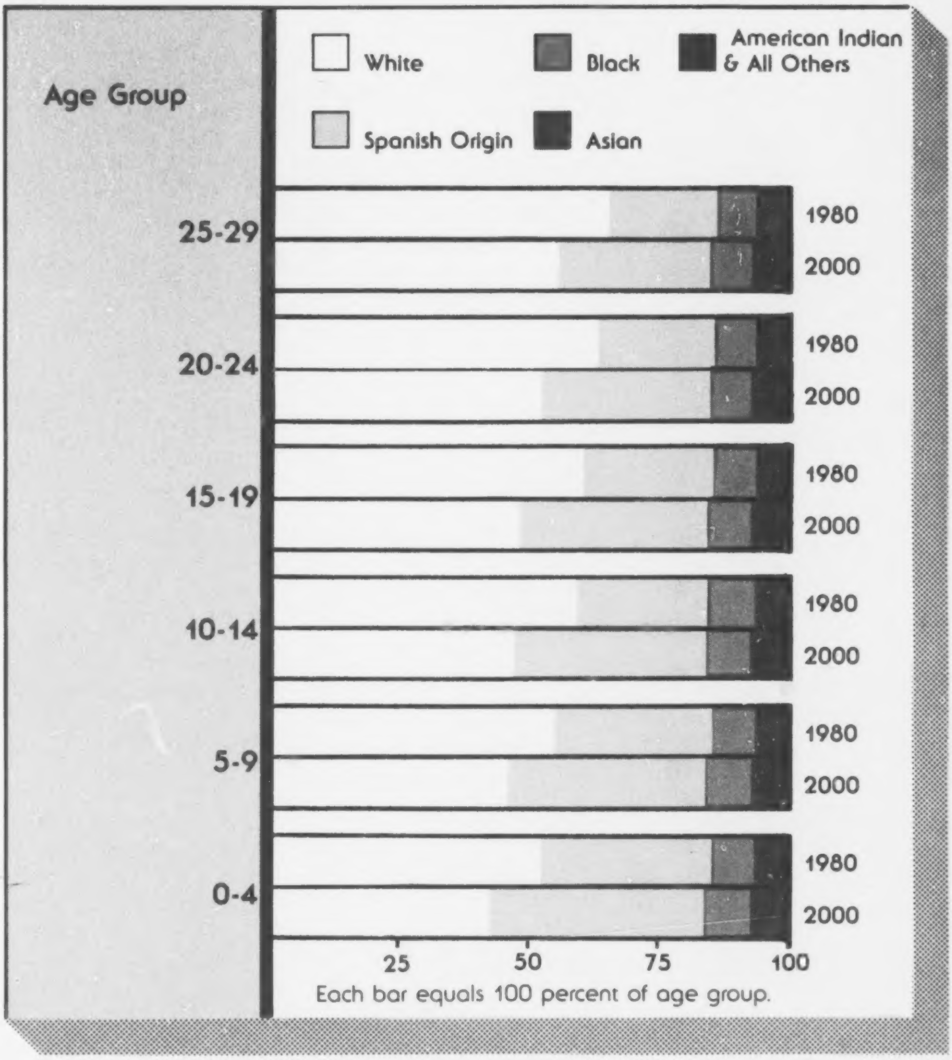
- Exhibit 3 shows that the Spanish-origin population tends to be highly concentrated in the younger age groups. Although people of Spanish origin constituted 19 percent of the total population of California in 1980, they represented 32, 29, and 25 percent respectively of the three youngest age groups (ages 0-4, 5-9, and 10-14).

- By the year 2000, children of Spanish origin are projected to account for 40, 38, and 36 percent respectively of the three youngest age groups.

- The numbers of Black, Asian, and American Indian children will not grow as rapidly as the Spanish-origin group, but by the year 2000, it is estimated that more than 10 percent of the children below age 15 in California will be Black.

## Exhibit 3

## School and College-Age Population by Race and Spanish Origin, 1980 (Actual) and 2000 (Projected) —California—



**Source:** Kaufman et al., 1983, Tables 20 and 22

**Note:** American Indians constitute between 0.9 and 1.1 percent of the state population of the 0-29 age groups. There are no data to indicate that the American Indian proportion of the various age groups will increase substantially between 1980 and 2000.

# Exhibit 4

# Educational Attainment by Race and Spanish Origin of Persons Aged 25 and Over, 1980

## —California—

Exhibit 4 shows the proportions of the population aged 25 and over that have completed various levels of education. As the levels of educational attainment rise, the proportions of the population reaching those levels decrease. The differences in attainment among racial and ethnic groups are striking. It must be emphasized that school attainment of California adults in 1980 does not necessarily reflect what is taking place among the present generation of students in school, but the educational attainment of parents has been shown to affect the educational choices of their children.

o In 1980, California had the seventh highest proportion in the nation (19.8 percent) of college graduates in its population aged 25 or older and the tenth highest percentage of high school graduates (73.6 percent) (American Demographics, 1982).

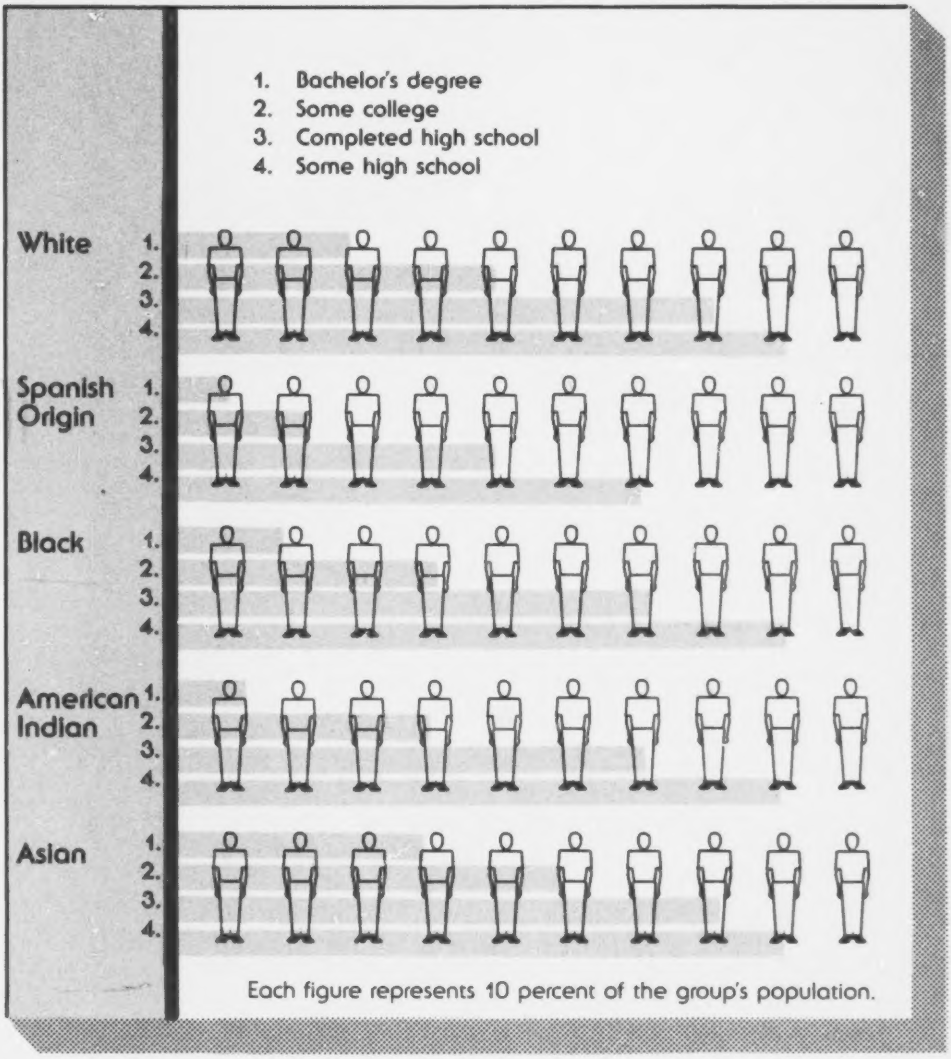
o Less than one-half of the Spanish-origin population aged 25 and over had completed high school in 1980, compared with more than three-fourths of the Whites and Asians and two-thirds of the Blacks and American Indians in the same age group.

o Approximately one-half of the Asians and Whites and one-third of the Blacks and American Indians aged 25 and over had completed some college, compared with one-fifth of the Spanish-origin population.

o The disparity in educational attainment is most striking at the bachelor's degree level or higher. In 1980, 21 percent of the White population and 31 percent of the Asian population aged 25 and over had completed at least a bachelor's degree, compared with 11 percent of the Blacks, 10 percent of the American Indians, and 6 percent of the Spanish-origin population.

o In a nationwide study, which shows the "leakage" of minorities from the "educational pipeline," 83 percent of White adult and school-age respondents in the Current Population Surveys from 1974 to 1978 completed high school compared with 72 percent for Blacks and 55 percent for Hispanics and American Indians (Astin, 1982). Data on persistence for California high school students are not available.

# Exhibit 4
# Educational Attainment by Race and Spanish Origin of Persons Aged 25 and Over, 1980
## —California—



Each figure represents 10 percent of the group's population.

**Source:** Kaufman et al., 1983, Table CA-4

# Exhibit 5
# Percentage of 1980 U.S. High School Seniors Subsequently Enrolled in College

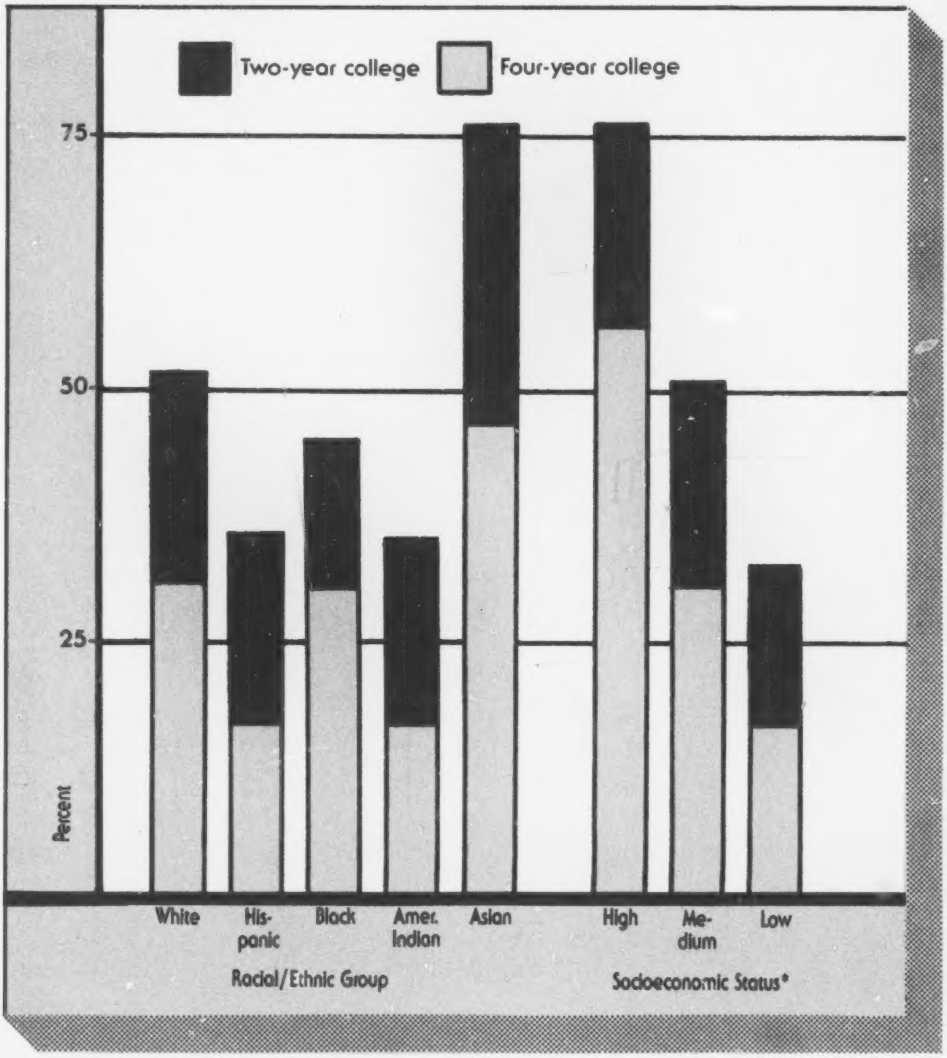
Taken together, Exhibits 5 and 6 illustrate the relationships among race and/or ethnicity, family income, and college attendance. Exhibit 5 displays the results of a national survey relating to the percentage of 1980 high school graduates who enrolled in college during the next several years (these data were not available on a state-by-state basis). It should be recognized that this was a national survey with limited generalization to the population of specific states. The survey did show that attendance patterns in the West were different from other regions. Although approximately the same percentage of western high school seniors attended college as seniors from other regions of the country, a greater percentage of students from the West attended two-year colleges than students from the other regions (28 percent in the West compared with 14 percent in the Northeast and 16 percent in the North Central states and the South).

- The five bars on the left of the exhibit show the college attendance patterns for the racial and Spanish-origin groups. White and Black students attended four-year institutions in approximately the same proportions, but a greater proportion of Whites than Blacks attended two-year institutions, which accounts for the greater overall college-going rate for Whites. Compared with the other groups, American Indian and Spanish-origin students attended two-year colleges in relatively large proportions and four-year colleges in smaller proportions. Attendance at both two-year and four-year institutions by students of Asian ancestry was far greater than for any other group.

- Attendance patterns vary according to socioeconomic status (SES), which is measured by a composite of parental education, family income, father's occupation, and household characteristics. High SES students are more likely to attend postsecondary educational institutions at all levels than those with lower SES.

## Exhibit 5

## Percentage of 1980 U.S. High School Seniors Subsequently Enrolled in College



**Source:** National Center for Education Statistics, 1984

*Socioeconomic status is measured by a composite of parental education, family income, father's occupation, and household characteristics.

## Exhibit 6

## Family Income by Race and Spanish Origin, 1979
## —California—

Exhibit 6 shows the percentages of the population with family incomes in three ranges: less than $15,000 per year; $15,000 to $34,999 per year; and $35,000 or more per year. The distribution for each racial or ethnic group is illustrated.

- About 50 percent of the Black, 46 percent of the Spanish-origin, and 45 percent of the American Indian populations come from families earning less than $15,000 per year, while only 10 to 11 percent of those groups come from families earning $35,000 or more.

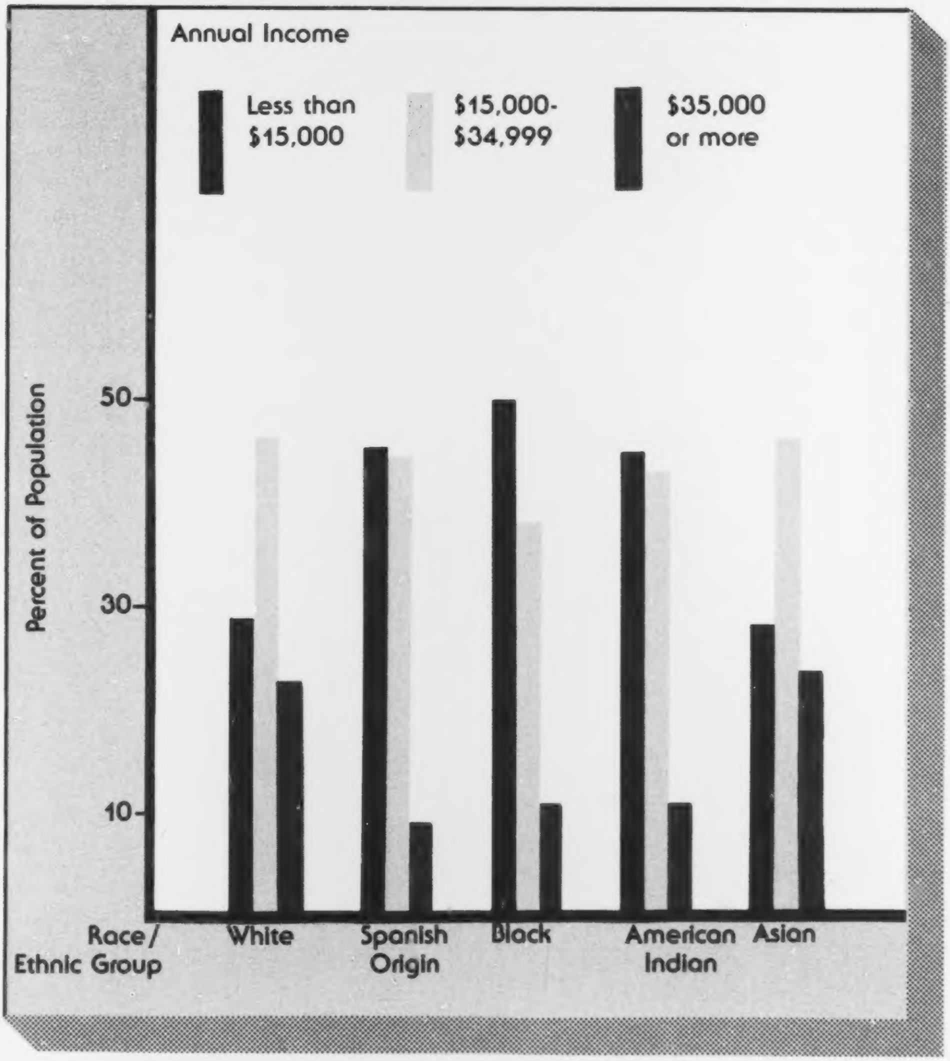
- Family income levels for the White and Asian populations are similar: compared with the other racial or ethnic groups, relatively low percentages earn less than $15,000 and higher percentages earn more than $35,000.

- These figures, when combined with the general information on student attendance patterns presented in Exhibit 5, demonstrate the important connection between economic status and education.

## Exhibit 6

## Family Income by Race and Spanish Origin, 1979

## —California—



Source: Kaufman et al., 1983, Table CA-6

# Exhibits 7A-7E
## Postsecondary Enrollment Compared with Representation in the Population, 1980
## —California—

Exhibits 7A-7E display the composition of postsecondary enrollments by race and ethnicity compared with each group's representation in the college-age population (aged 20-29). Each exhibit uses bars to portray the proportion of one racial or ethnic group enrolled in each of the four levels of postsecondary education. The bars are superimposed upon a background field representing that group's proportion of the college-age population in the state. Thus, the reader can determine whether a group is well represented among postsecondary students in proportion to its representation in the population.

- o The White proportion of enrollments at all levels of postsecondary education is greater than the White proportion of the college-age population in general. The White proportion of two-year college enrollment is substantially greater than the White share of the college-age population, and White representation increases at the four-year, graduate, and first professional levels.

- o Hispanics are underrepresented at all levels of postsecondary education, especially at the graduate level, where the proportions of Hispanic enrollment is one-quarter as large as the Spanish-origin proportion of the college-age population in California.

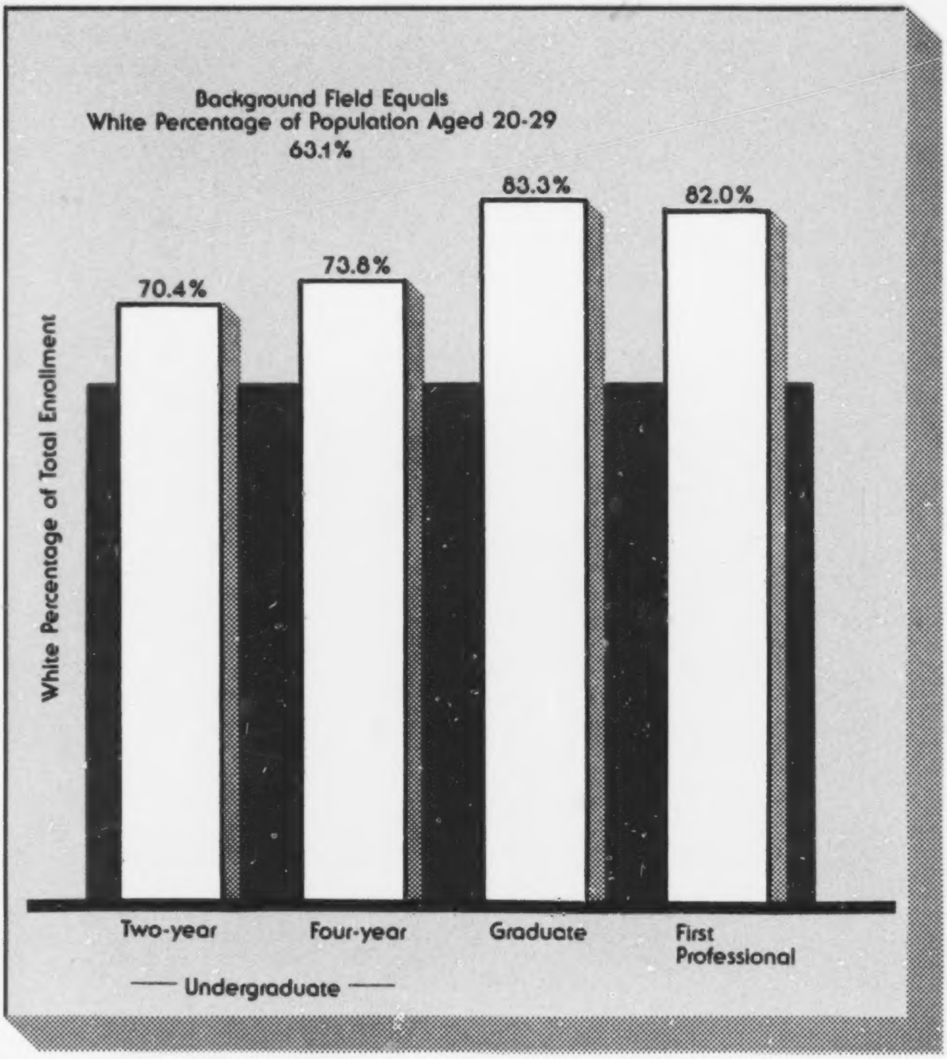
- o American Indians and Blacks are well represented at the two-year level, and American Indians are well-represented at the four-year level. At the other levels, however, they are underrepresented. At the graduate level, the proportion of Black students is slightly greater than one-half the size of the Black proportion of the state college-age population, and the American Indian proportion is approximately two-thirds the size of that group's proportion of the college-age population. At the first-professional level, both groups' proportions are approximately one-half the size of their proportions of the college-age population in the state.

- o Asians are well represented at all levels of higher education. The proportions of Asians enrolled equals or exceeds the Asian proportion of the college-age population in California.

## Exhibit 7A

## White Postsecondary Enrollments Compared with Representation in the Population, 1980

## —California—

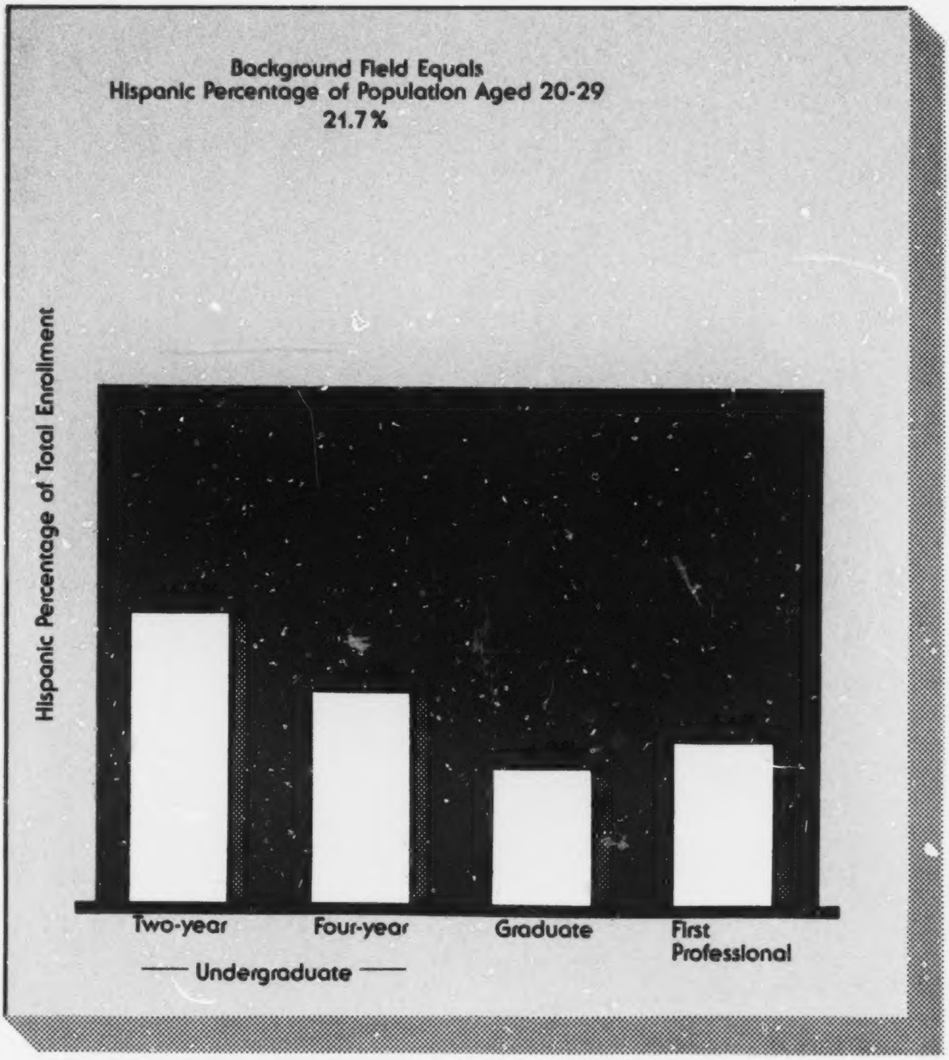


Source: Kaufman et al., 1983. Tables 7 and 22

# Exhibit 7B

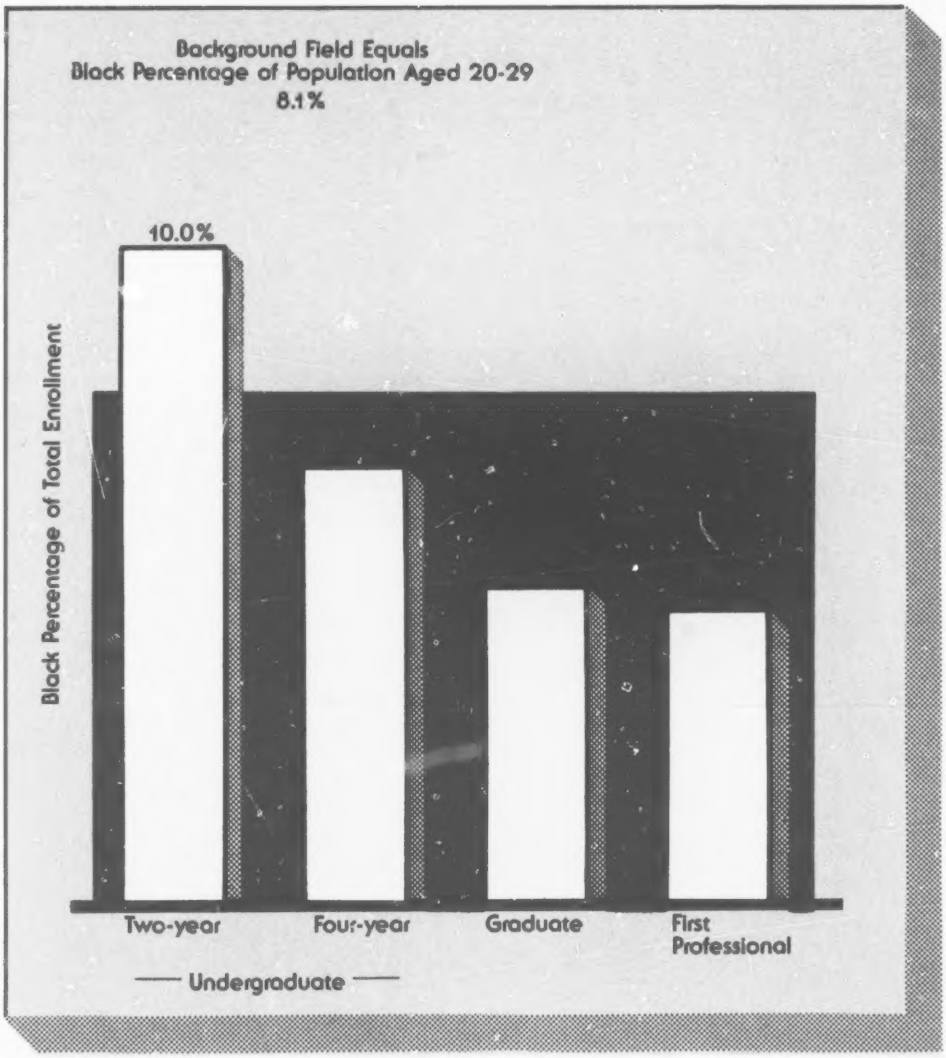
## Hispanic Postsecondary Enrollments Compared with Representation in the Population, 1980

## —California—



Source: Kaufman et al., 1983, Tables 7 and 22

## Exhibit 7C
## Black Postsecondary Enrollments Compared with Representation in the Population, 1980
## —California—

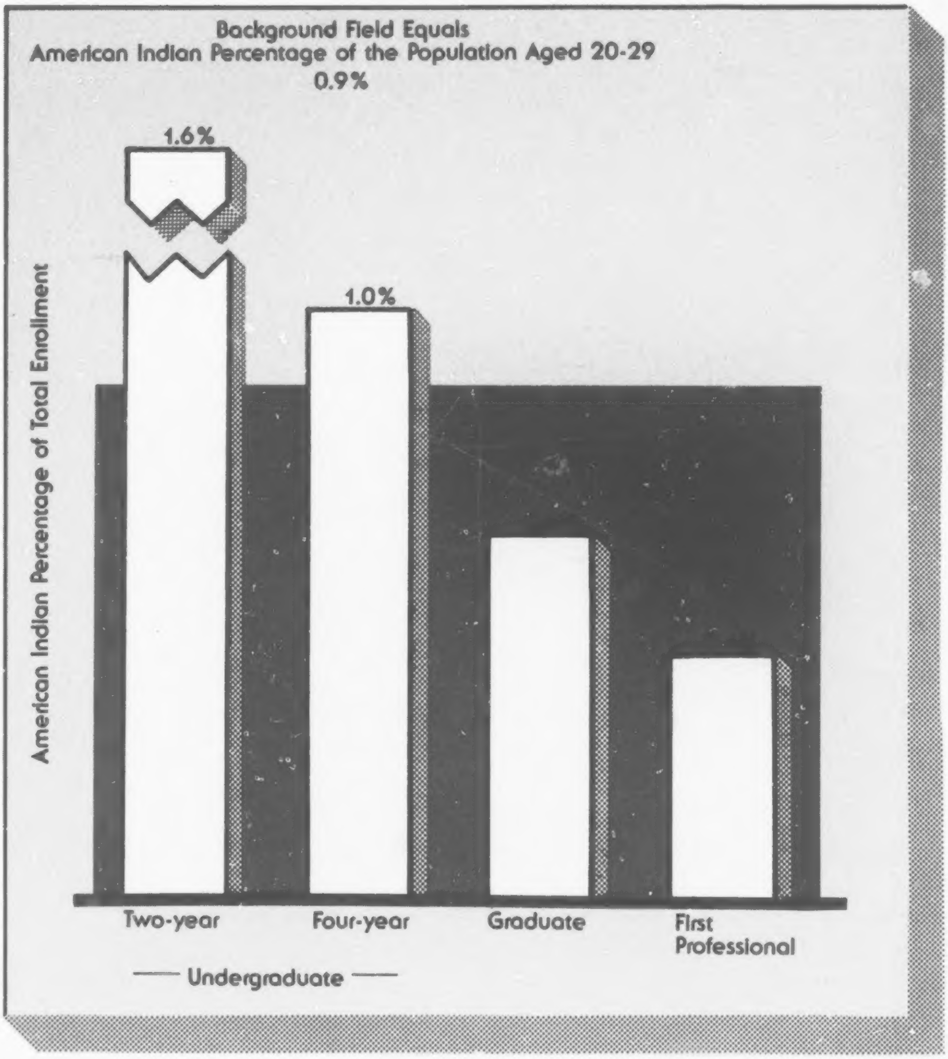


Source: Kaufman et al., 1983, Tables 7 and 22

## Exhibit 7D

## American Indian Postsecondary Enrollments Compared with Representation in the Population, 1980

## —California—

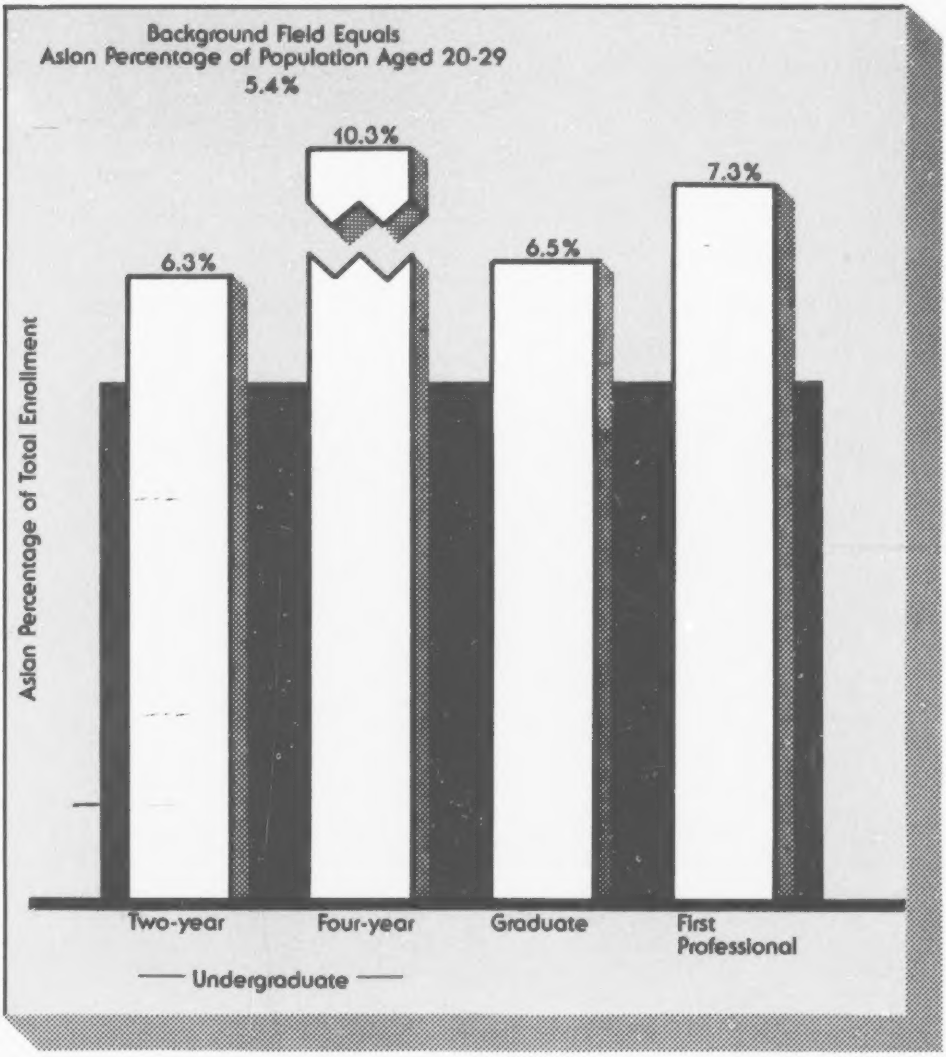


**Source:** Kaufman et al., 1983, Tables 7 and 22

## Exhibit 7E

## Asian Postsecondary Enrollments Compared with Representation in the Population, 1980

## —California—



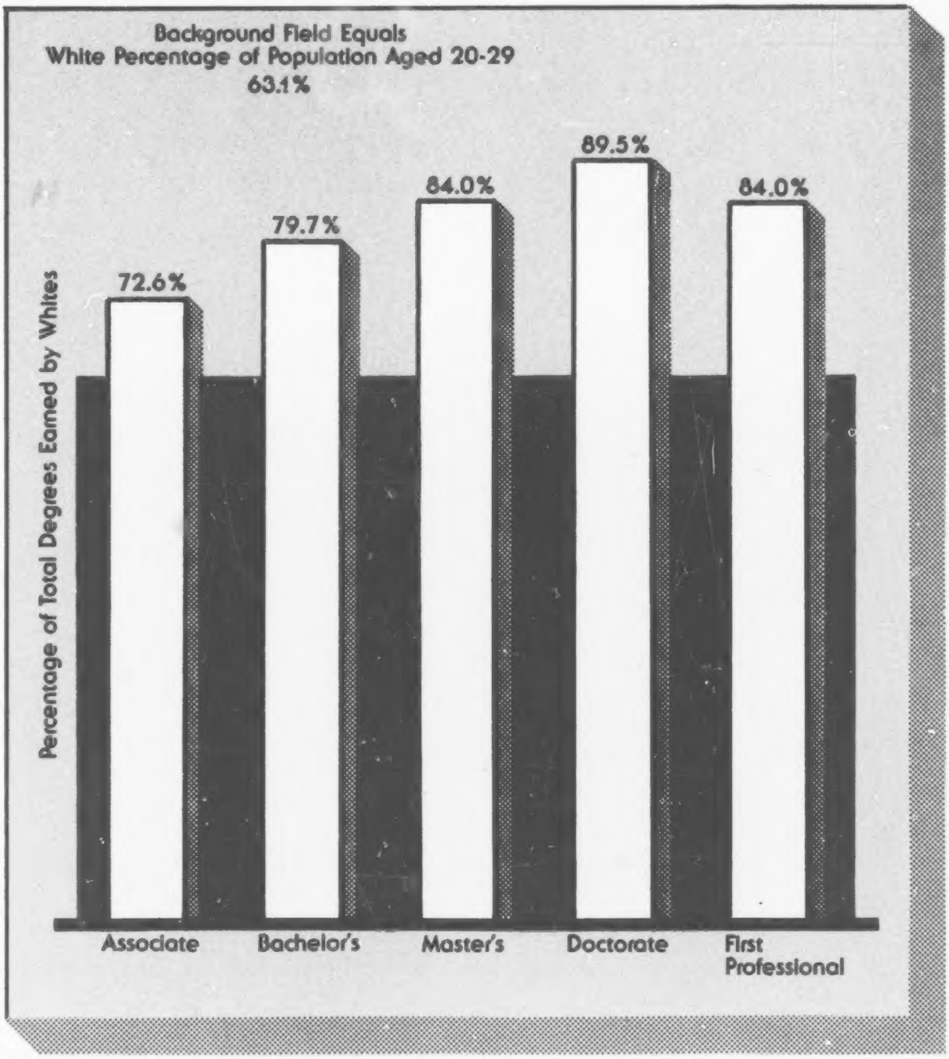
**Source:** Kaufman et al., 1983, Tables 7 and 20

# Exhibits 8A-8E
## Degrees Earned in California Compared with Representation in the Population, 1980

Exhibits 8A-8E display the distribution among racial and ethnic groups of earned degrees at five levels (associate, bachelor's, master's, doctoral, and first professional) with each group's representation in the college-age population (aged 20-29). Each exhibit uses bars to portray the proportion of earned degrees by one racial or ethnic group in each of the five levels of postsecondary education. The bars are superimposed upon a background field representing that group's proportion of the college-age population. Thus, the reader can determine whether a group is well represented in earned degrees in proportion to its representation in the population.

- In general, when the proportions of degrees awarded to members of minority groups are compared with the proportions of the college-age population, the overall pattern of underrepresentation of minorities is similar to that in enrollments, especially at the baccalaureate and higher levels.
- The White proportion of those earning degrees at all levels of postsecondary education is substantially greater than the White proportion of the college-age population in general.
- Hispanics are underrepresented in earned degrees at all levels of postsecondary education. At the two-year degree level, the proportion of degrees earned by Hispanic students is slightly more than one-half the size of the Spanish-origin proportion of the college-age population in the state. The proportions of degrees earned by Hispanic students are approximately one-fourth as large as the Spanish-origin proportion of the college-age population at the bachelor's, master's, and first professional levels and less than one-tenth as large at the doctoral level.
- The proportion of degrees earned by Blacks at two-year institutions is about equal to the Black proportion of the college-age population. At higher levels, however, earned degrees of Blacks represent only about one-half of their share of that population group.
- American Indians are well represented at the two-year, bachelor's, and master's levels but underrepresented at the doctoral and first professional levels. The American Indian proportion of doctoral degrees is less than one-third the size of the American Indian proportion of the college-age population in California and less than one-half the size at the first professional level.
- The Asian proportions of degrees earned are substantially larger than the Asian proportion of the college-age population in the state at all levels except the doctoral.

# Exhibit 8A
# Degrees Earned by Whites Compared with Representation in the Population, 1980
## —California—

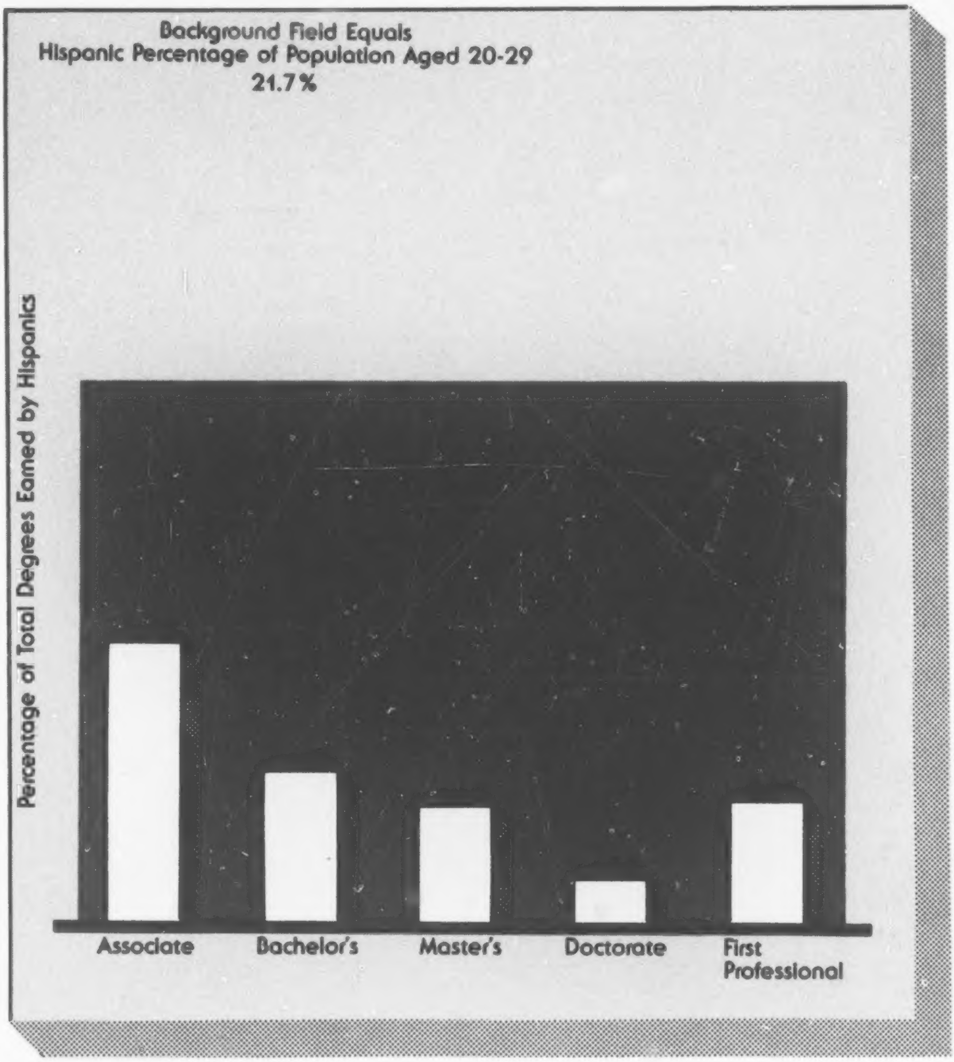


Source: Kaufman et al., 1983, Tables 12 and 22

## Exhibit 8B

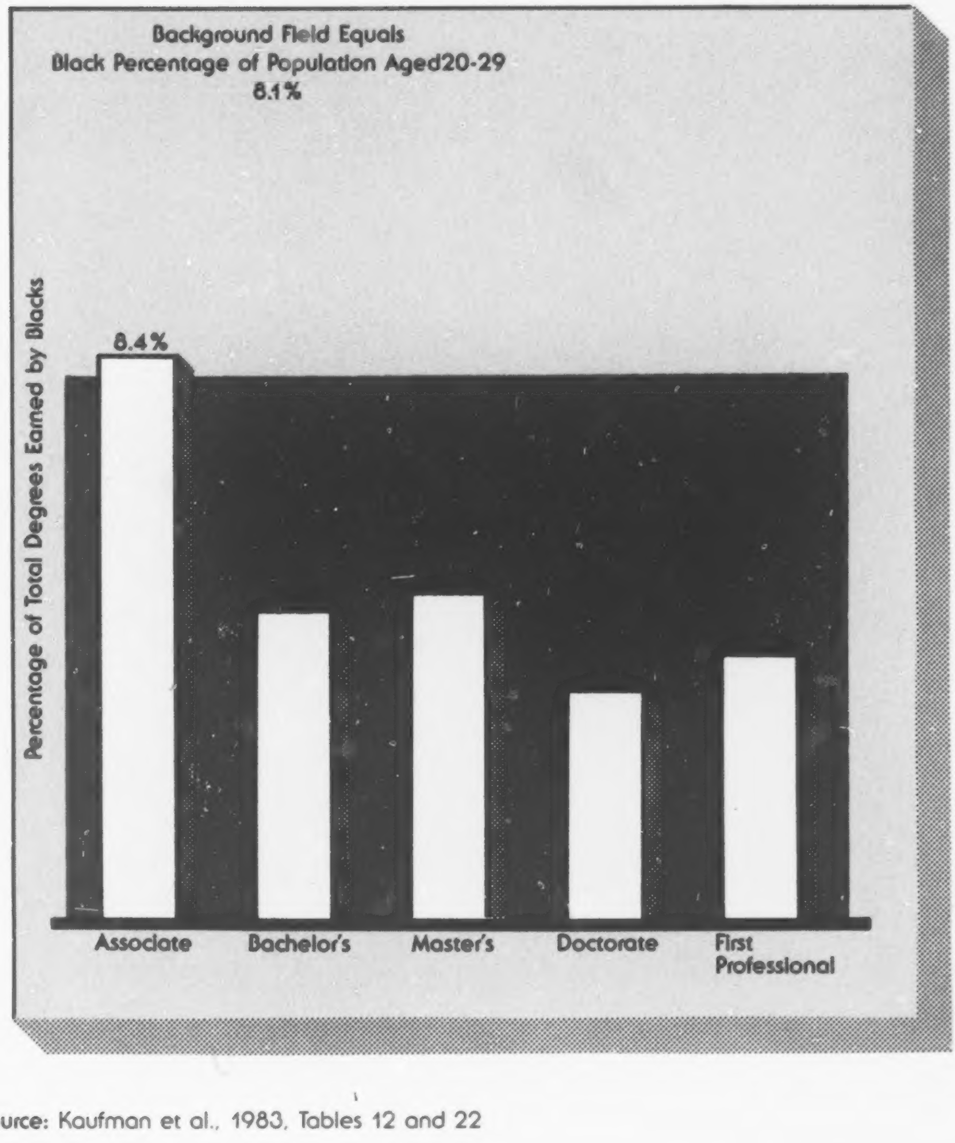
## Degrees Earned by Hispanics Compared with Representation in the Population, 1980

## —California—



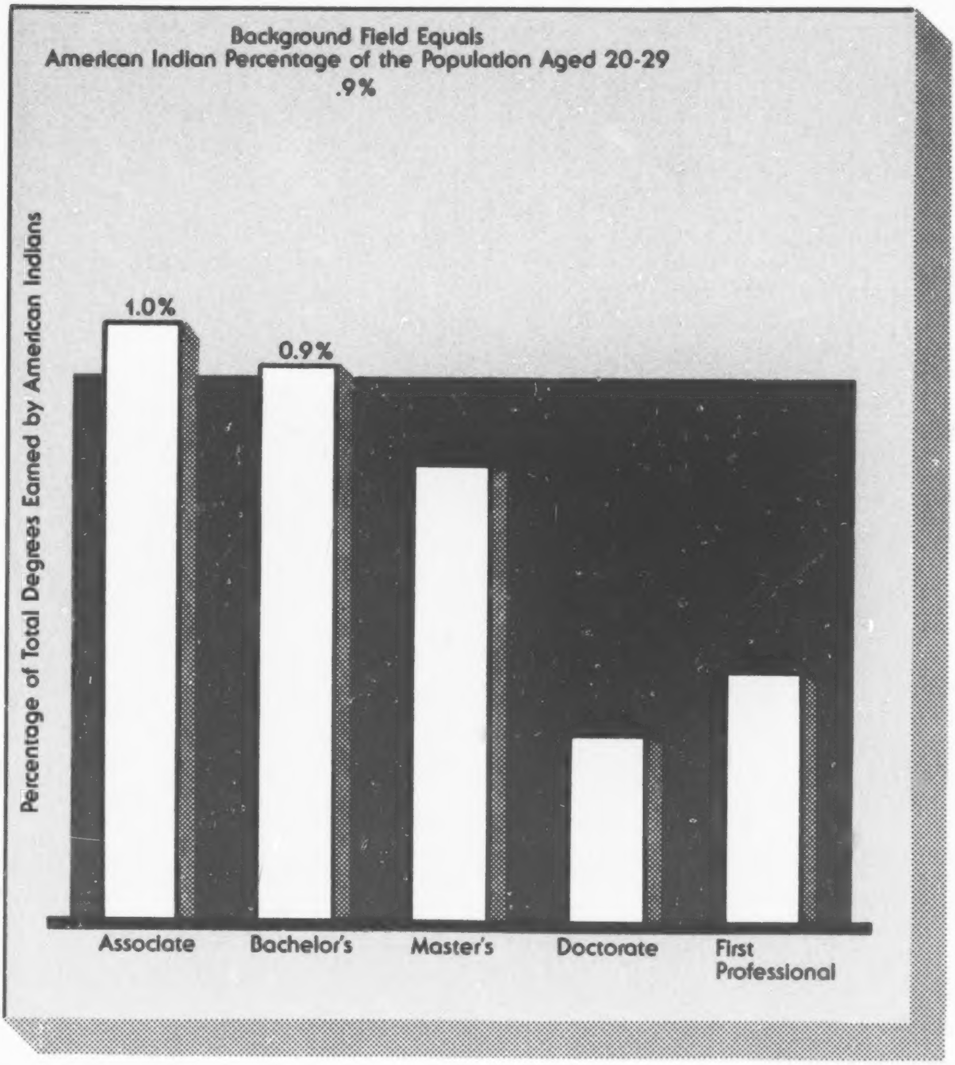
Source: Kaufman et al., 1983, Tables 12 and 22

## Exhibit 8C
## Degrees Earned by Blacks Compared with Representation in the Population, 1980
## —California—



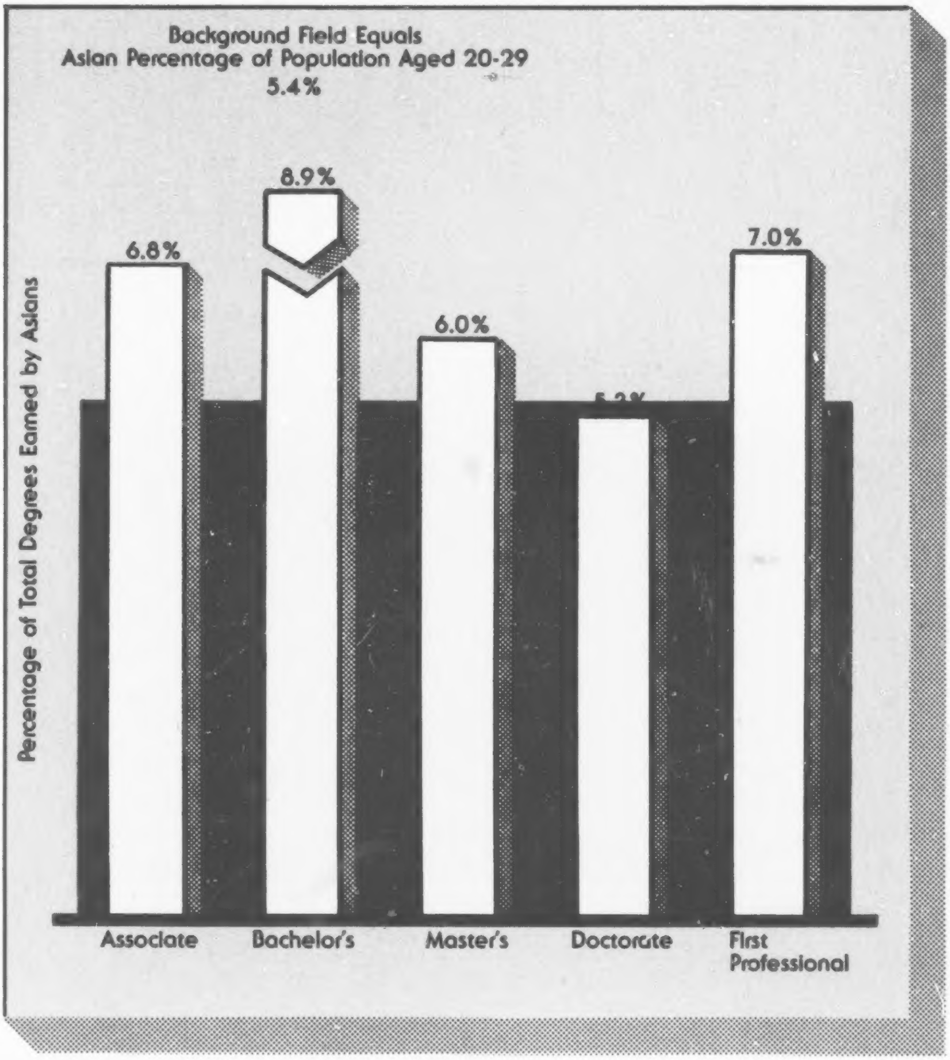
Source: Kaufman et al., 1983, Tables 12 and 22

## Exhibit 8D
## Degrees Earned by American Indians Compared with Representation in the Population, 1980
## —California—



Source: Kaufman et al., 1983, Tables 12 and 23

# Exhibit 8E
## Degrees Earned by Asians Compared with Representation in the Population, 1980
## —California—



Source: Kaufman et al., 1983, Tables 12 and 20

## Exhibit 9

# Earned Degrees by Race and Spanish Origin, 1976-77 to 1980-81

## —California—

This table presents the number of degrees awarded at five levels (associate, bachelor's, master's, doctoral, and first professional) by racial or ethnic group. At the doctoral and first professional levels, interpretation is difficult because such small numbers of degrees are awarded to minority students that year-to-year fluctuations appear as substantial percentage changes.

- The number of associate degrees awarded in California declined by 16 percent between 1976-77 and 1980-81, the number of doctorates increased by nearly 13 percent over the same period, and the number of first professional degrees increased by more than 8 percent. There were slight declines at the bachelor's and master's levels.
- At the bachelor's, master's, and first professional degree levels, there were substantial increases in degrees earned by Hispanic students between 1976-77 and 1980-81, but Hispanics experienced a significant decline in the number of doctorates during the same period. The decline in associate degrees awarded to Hispanics was far less than the overall decrease in California.
- Black students earned substantially more first professional degrees in 1980-81 than in 1976-77 but markedly fewer associate, bachelor's, and master's degrees.
- Although there was a substantial increase in bachelor's degrees awarded to American Indians from 1976-77 to 1980-81, there have been sharp declines at all other degree levels.
- In 1980-81 Asian students earned slightly more associate degrees and substantially more degrees at all other levels than they did in 1976-77.

## Exhibit 9

# Earned Degrees by Race and Spanish Origin, 1976-77 to 1980-81

## —California—

| | Degrees Awarded 1976-77 | Degrees Awarded 1978-79 | Percent Change 1976-78 | Degrees Awarded 1980-81 | Percent Change 1978-80 | Percent Change 1976-80 |
|---|---|---|---|---|---|---|
| **State Totals** | | | | | | |
| Associate | 70,172 | 59,595 | -15.1 | 58,912 | -1.1 | -16.0 |
| Bachelor's | 82,413 | 82,376 | -0.0 | 81,584 | -1.0 | -1.0 |
| Master's | 31,109 | 31,221 | 0.4 | 30,609 | -2.0 | -1.6 |
| Doctorate | 3,682 | 3,716 | 0.9 | 4,152 | 11.7 | 12.8 |
| First Professional | 7,885 | 8,550 | 8.4 | 8,545 | -0.1 | 8.4 |
| **White Students** | | | | | | |
| Associate | 53,179 | 43,831 | -17.6 | 41,848 | -4.5 | -21.3 |
| Bachelor's | 66,642 | 64,940 | -2.6 | 62,102 | -4.4 | -6.8 |
| Master's | 23,774 | 23,660 | -0.5 | 22,712 | -4.0 | -4.5 |
| Doctorate | 2,797 | 2,877 | 2.9 | 3,183 | 10.6 | 13.8 |
| First Professional | 6,743 | 7,290 | 8.1 | 7,083 | -2.8 | 5.0 |
| **Hispanic Students** | | | | | | |
| Associate | 6,549 | 5,659 | -13.6 | 6,448 | 13.9 | -1.5 |
| Bachelor's | 3,930 | 4,276 | 8.8 | 4,725 | 10.5 | 20.2 |
| Master's | 1,037 | 984 | -5.1 | 1,234 | 25.4 | 19.0 |
| Doctorate | 81 | 68 | -16.0 | 62 | -8.8 | -23.5 |
| First Professional | 313 | 334 | 6.7 | 418 | 25.1 | 33.5 |
| **Black Students** | | | | | | |
| Associate | 5,352 | 5,079 | -5.1 | 4,854 | -4.4 | -9.3 |
| Bachelor's | 3,672 | 3,792 | 3.3 | 3,443 | -9.2 | -6.2 |
| Master's | 1,767 | 1,578 | -10.7 | 1,276 | -19.1 | -27.8 |
| Doctorate | 117 | 96 | -17.9 | 113 | 17.7 | -3.4 |
| First Professional | 230 | 282 | 22.6 | 313 | 11.0 | 36.1 |
| **American Indian Students** | | | | | | |
| Associate | 808 | 545 | -32.5 | 572 | 5.0 | -29.2 |
| Bachelor's | 627 | 650 | 3.7 | 697 | 7.2 | 11.2 |
| Master's | 217 | 181 | -16.6 | 199 | 9.9 | -8.3 |
| Doctorate | 21 | 11 | -47.6 | 10 | -9.1 | -52.4 |
| First Professional | 60 | 37 | -38.3 | 33 | -10.8 | -45.0 |
| **Asian Students** | | | | | | |
| Associate | 3,628 | 3,406 | -6.1 | 3,930 | 15.4 | 8.3 |
| Bachelor's | 5,152 | 5,949 | 15.5 | 6,951 | 16.8 | 34.9 |
| Master's | 1,423 | 1,439 | 1.1 | 1,632 | 13.4 | 14.7 |
| Doctorate | 65 | 121 | 86.2 | 187 | 54.5 | 187.7 |
| First Professional | 447 | 514 | 15.0 | 587 | 14.2 | 31.3 |

Source: Kaufman et al., 1983, Tables 12, 13, 14

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6.3

# Minorities in Higher Education: The Changing Southwest

## Colorado

A report prepared by the WICHE Information Clearinghouse in cooperation with the Western Regional Office of the College Board and with the support of the Atlantic Richfield Foundation

Geoffrey Dolman, Jr.
Norman S. Kaufman

Western Interstate Commission for Higher Education WICHE
The College Board

# WICHE

WICHE, the Western Interstate Commission for Higher Education, is a nonprofit regional organization. It helps the thirteen member states to work together to provide high-quality, cost-effective programs to meet the education and manpower needs of the West. Member states are Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming. Through its Information Clearinghouse, WICHE provides information to assist higher education and governmental policy makers in the West.

This series of reports includes the following publications:

**Minorities in Higher Education: The Changing Southwest (Arizona)**, publication no. 2A134a

**Minorities in Higher Education: The Changing Southwest (California)**, publication no. 2A134b

**Minorities in Higher Education: The Changing Southwest (Colorado)**, publication no. 2A134c

**Minorities in Higher Education: The Changing Southwest (New Mexico)**, publication no. 2A134d

**Minorities in Higher Education: The Changing Southwest (Texas)**, publication no. 2A134e

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Published August 1984
Western Interstate Commission for Higher Education
P.O. Drawer P
Boulder, Colorado 80302
Telephone: (303) 497-0200
An Affirmative Action/Equal Opportunity Employer
Publication Number 2A134c
Printed in the United States of America
35-100-540-000-401:5C:884:ROB:2A134c

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# Foreword

Sometimes we may become aware of societal trends without recognizing their potential effects on our social institutions. At other times, we may fail to respond adequately to social changes, even though we are aware that they are taking place. Among the virtues of our society are both the tendency toward self-correction--to make adjustments in our social institutions so that they function effectively--and the tendency toward making adjustments that anticipate needed changes and that, in a sense, preempt the need for self-correction.

As data in this and companion reports show, the current levels of education and income achieved by racial and ethnic minorities fall below that of Whites. This imbalance in economic and educational attainment, plus the rapid growth in the population of racial and ethnic minority groups, raises important issues for education and government policy makers in each state. It is the intent of this report to help focus the discussion on these issues and to encourage appropriate responses.

WICHE is grateful to the organizations and individuals who have worked with us on this important project. The College Board cosponsored the study and provided assistance and advice at several stages. The Atlantic Richfield Foundation provided additional financial support. A regional advisory committee, whose members are listed on the following page, provided valuable assistance in preparing these reports and helped develop a strategy for disseminating the results of the study.

August 1984

Phillip Sirotkin
Executive Director
Western Interstate Commission
for Higher Education

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# Introduction

This series of state reports is intended to highlight the implications for educational planning of the changing demography of the Southwest. This project is the outgrowth of an earlier report, which was prepared to provide background data for a regional higher education conference on minority access and retention in higher education (Kaufman et al., 1983).

The decision to concentrate on minorities in higher education in the southwestern states follows from several conclusions that have been well documented.

- Certain racial and ethnic minorities have been underrepresented in higher education relative to nonminorities. This is especially true of Hispanic students, who are well represented, proportionally and numerically, in the population of these states.
- These minorities are even less well represented among college and professional school graduates.
- Increases in the proportion of racial and ethnic minorities among successive age cohorts present a challenge to educators and policy makers concerned with reversing these patterns of underrepresentation.

The reports focus on each of five southwestern states (Arizona, California, Colorado, New Mexico, and Texas) individually in order to call attention to the most important findings in each state.

As college-age populations in these five southwestern states grow in terms of both the numbers and percentages of ethnic minority individuals, policy makers will be faced with a number of serious educational and political questions. For example:

- Are current approaches to provision of educational opportunity--for all seeking it, regardless of ethnic background--sufficient, now and for the future?
- What are the implications for higher education and for institutions' program and resource "mix" of the growing minority share of the college-age population and the simultaneous decline (in some states) of the proportion of Whites in the same age groups?

- What are the implications of the growth of these minority populations for the economies of the states and their supplies of highly trained manpower, given the current distribution of minority students throughout the educational system (by institutional level and type, for example)?

- What are the implications for the higher education institutions of the current pattern of distribution of minority students, given the changes in the composition of the college-age group?

- If the educational patterns of minority students remain unchanged as their numbers grow, what are the possible social and political consequences?

These questions are meant only to suggest the seriousness and complexity of policy issues that need attention. The hope of the organizations publishing the report is that its contents will be useful as these challenging questions are addressed.

## Definitions

The information in these reports comes primarily from two sources: the 1980 census of the population and related surveys by the United States Bureau of the Census provided population and demographic data, and the Higher Education General Information Survey (HEGIS) conducted by the National Center for Education Statistics (NCES) provided education data. Reference to these two sources ensures that there will be comparability in the data presented across states and that other users will have access to the same data sources.

Caution must be used when comparing the two data bases, however, because each source defines racial and ethnic groups differently, with particular impact on the "Hispanic" population group. The HEGIS format designates five racial or ethnic groups: American Indian, Black, Asian, Hispanic, and White. The Census Bureau uses the racial designations American Indian, Black, Asian, Other, and White, plus a further designation "Persons of Spanish Origin" and "Persons not of Spanish Origin," stating that persons of Spanish origin may be of any race. In this report, the Census Bureau data have been reconciled with the HEGIS data format, resulting in the following comparable groups:

| HEGIS | CENSUS |
|---|---|
| American Indian | American Indians, Eskimos, and Aleuts whether of Spanish origin or not |
| Black | Blacks not of Spanish origin |
| Asian | Asian and Pacific Islanders whether of Spanish origin or not |
| Hispanic | Persons of Spanish origin, regardless of race |
| White | White, not of Spanish origin |
| Residual | Total population minus the above (also Other races not of Spanish origin) |

While these breakdowns do not avoid all problems of comparability, they appear to work well for the purposes of this report. To keep the terminology short, in all cases Black and White refer to Black not-Hispanic and White not-Hispanic. Exhibits derived from census data refer to the category "Spanish origin," while exhibits derived from HEGIS data use the term "Hispanic" to identify essentially the same group.

It further must be recognized that the terms "Spanish origin" and "Hispanic" aggregate into one group several ethnic groups, e.g., Central American immigrants, Latinos, Mexican Americans, and others, which may vary from state to state. Each of these groups has its own demographic and cultural characteristics. Policy makers may wish to be aware of these different characteristics and of their implications for higher education.

The most recent and reliable data available were used in this report. In some cases more recent data were available, but older information was used because it was comparable with the data for earlier years whereas the newer data were not. Where the racial and ethnic composition of the college-age population is compared with the composition of the student population and the distribution of degrees among racial and ethnic groups (Exhibits 8A-8E and 9A-9E), HEGIS data from 1980 were used for the education information in order to compare them with census data from the same year.

# Summary

- Colorado's population is projected to be between 4 million and 4.6 million by the year 2000, up from 2.9 million in 1980, a twenty-year growth rate of between 38 and 49 percent. (See Exhibit 1.)
- Two-thirds of the population growth from 1970 to 1980 can be accounted for by in-migration, which is projected to remain high.
- People of Spanish origin accounted for 11.8 percent of the total population of Colorado in 1980, but they accounted for nearly 18 percent of the 0-4 age group. (See Exhibits 2 and 3.)
- By 2000, nearly one-quarter of the age 0-4 population is projected to be of Spanish origin. (See Exhibit 3.)
- The other minority groups in Colorado are smaller. Blacks represented 3.5 percent of the total population in 1980, American Indians 0.6 percent, Asians 1.0 percent, and all others 0.5 percent. However, the other minority populations generally show growth patterns similar to that of the Spanish-origin population. (See Exhibit 3.)
- Although Colorado has the highest proportion of people aged 25 and older with college degrees, Whites far exceed minority groups in postsecondary educational attainment. (See Exhibit 4.)
- Data suggest that Hispanics tend to have higher high school dropout rates than Blacks or Whites and tend to leave school earlier. For example, the Hispanic enrollment in twelfth grade in fall 1982 was only 72 percent the size of Hispanic enrollment in ninth grade three years earlier, compared with 91 and 89 percent respectively for Black and White enrollments. (See Exhibit 5.)
- Statistics from Colorado appear to be similar to nationwide figures that show 83 percent of White students completing high school over the period from 1973 to 1979 compared with 72 percent of Black students and 55 percent of Hispanics. (See narrative to Exhibit 5.)
- National data indicate that smaller percentages of students from low-income families enroll in postsecondary education than students from medium- and high-income families. In Colorado, relatively high percentages of Spanish-origin, Black, and American Indian families earned less than $15,000 in 1979. (See Exhibits 6 and 7.)
- Present enrollment and earned degree patterns show serious underrepresentation (relative to their proportions in the college-age population--aged 20-29) of some minority groups in baccalaureate, master's, doctoral, and first professional degree programs. (See Exhibits 8A-8E and 9A-9E.)
- The numbers of associate, bachelor's, master's, and doctoral degrees awarded to Hispanic students have dropped since 1977. Blacks have earned fewer associate and doctoral degrees since 1977. (See Exhibit 10.)
- In summary, the greatest population growth in the next twenty years will take place among the minority populations, whose rates of postsecondary educational attainment and socioeconomic status have been low historically.

# Exhibit 1

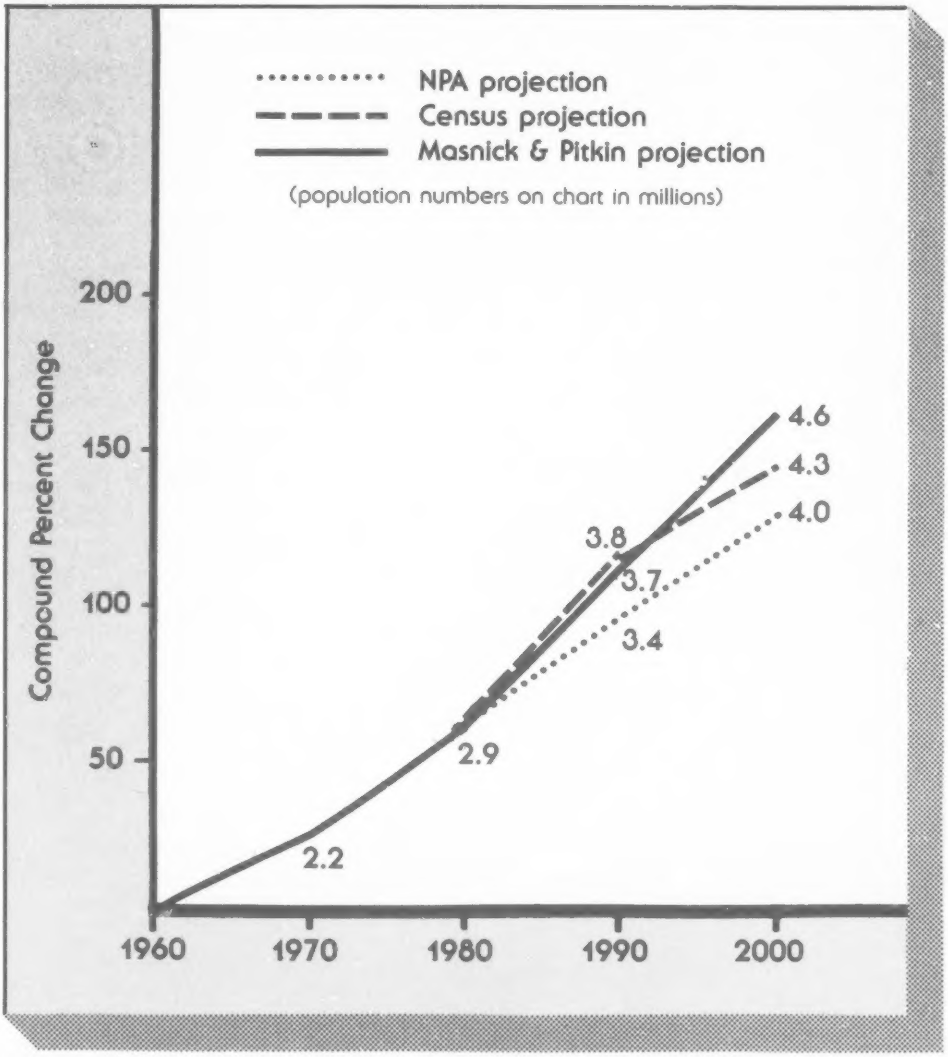
# Population Growth, 1960 to 1980, and Three Projections, 1990 to 2000

This exhibit shows the actual percentage growth in Colorado's population from 1960 to 1980. The dotted, dashed, and solid lines represent three different population projections for 1990 and 2000. These projections are based on mathematical calculations of trends evident today. They do not take into account economic or social factors that may cause the growth rate to accelerate or to slow.

- Colorado's population is projected to reach 4 million to 4.6 million by the year 2000, up from 2.9 million in 1980. The growth from 1980 to 1990 is estimated to be approximately 20 to 30 percent, and estimates of the overall change from 1980 to 2000 range from 38 to 59 percent.
- Both the Bureau of the Census and the National Planning Association project that Colorado will have the seventh largest growth rate in the 1980s (Robey and Russell, 1983).
- Two-thirds of the population growth from 1970 to 1980 can be attributed to in-migration, and the other one-third to natural growth (Masnick and Pitkin, 1982). Many of the people migrating to Colorado are young adults, who have attained or are approaching those years in which they will be starting families.

## Exhibit 1

## Population Growth, 1960 to 1980, and Three Projections, 1990 to 2000



**Sources:** Robey and Russell, 1983; U.S. Bureau of the Census, 1970 and 1980; Masnick and Pitkin, 1982.

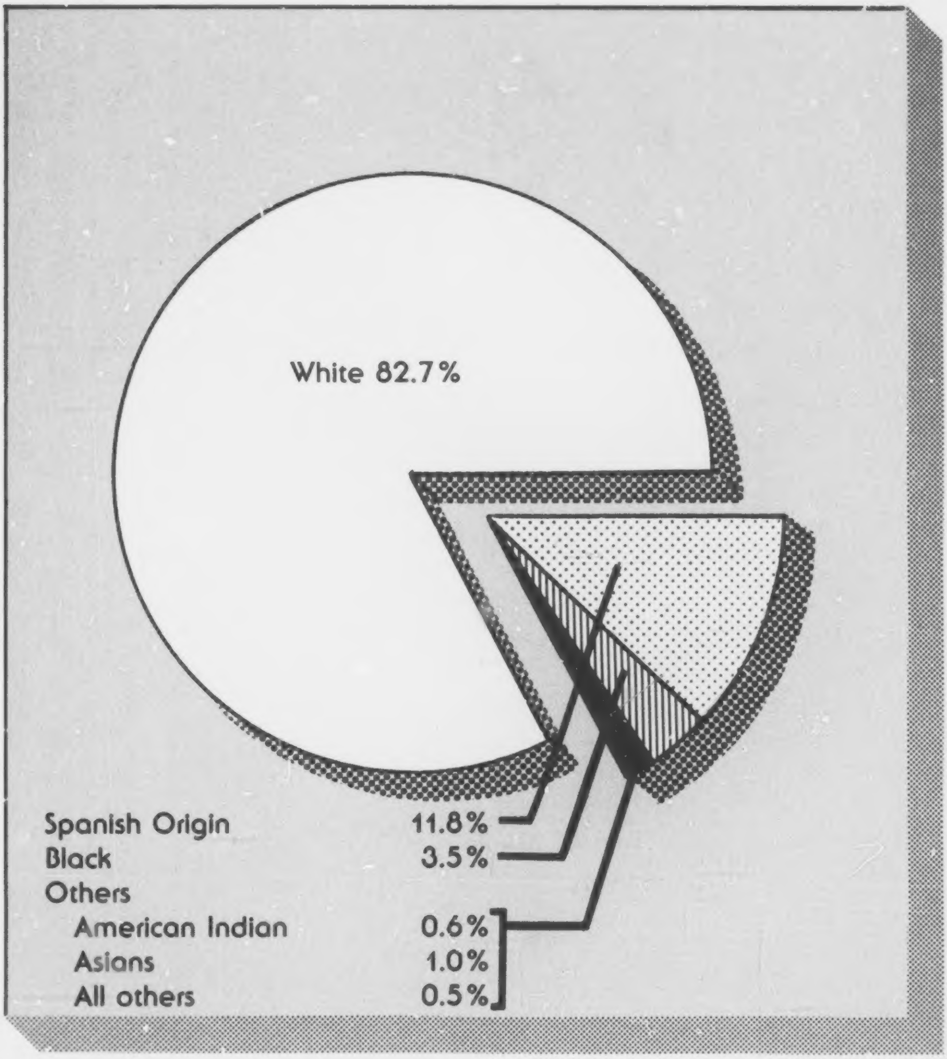
**Note:** The Masnick and Pitkin projections are plotted as found in their report. Projections for 2000 from the National Planning Association and the Bureau of the Census are estimates calculated by regression analysis using actual population figures from the 1960, 1970, and 1980 censuses and the 1990 projections.

# Exhibit 2
# Population by Race and Spanish Origin, 1980

Exhibit 2 presents the proportions of racial and ethnic groups in the 1980 population in Colorado. Since the data collected on race and Spanish origin in 1970 and 1980 are not comparable, it is not possible to make an accurate comparison between the two censuses.

- Colorado's largest minority group is the Spanish-origin population. In size of total population, the state ranks 28th, but its Spanish-origin population is the ninth largest among the United States. Nearly 12 percent of the population considers itself to be of Spanish origin, which is the fifth highest percentage in the nation. (American Demographics, 1983).
- Denver had the seventeenth largest metropolitan Spanish-origin population in the country in 1980, with more than 164,000. Pueblo ranked forty-ninth with nearly 42,000. In terms of the percentage of Spanish-origin population, Pueblo ranked tenth with 33 percent, Greeley twenty-ninth with 17 percent, and Denver forty-first with 11.5 percent (American Demographics, 1983).
- In comparison with the Spanish-origin population, other minority groups in Colorado are small: Blacks comprise 3.5 percent of Colorado's population, American Indians 0.6 percent, Asians 1.0 percent, all others 0.5 percent (Kaufman et al., 1983, Tables 21 and 23).

## Exhibit 2
## Population by Race and Spanish Origin, 1980



**Source:** Kaufman et al., 1983, Table 21 and 23

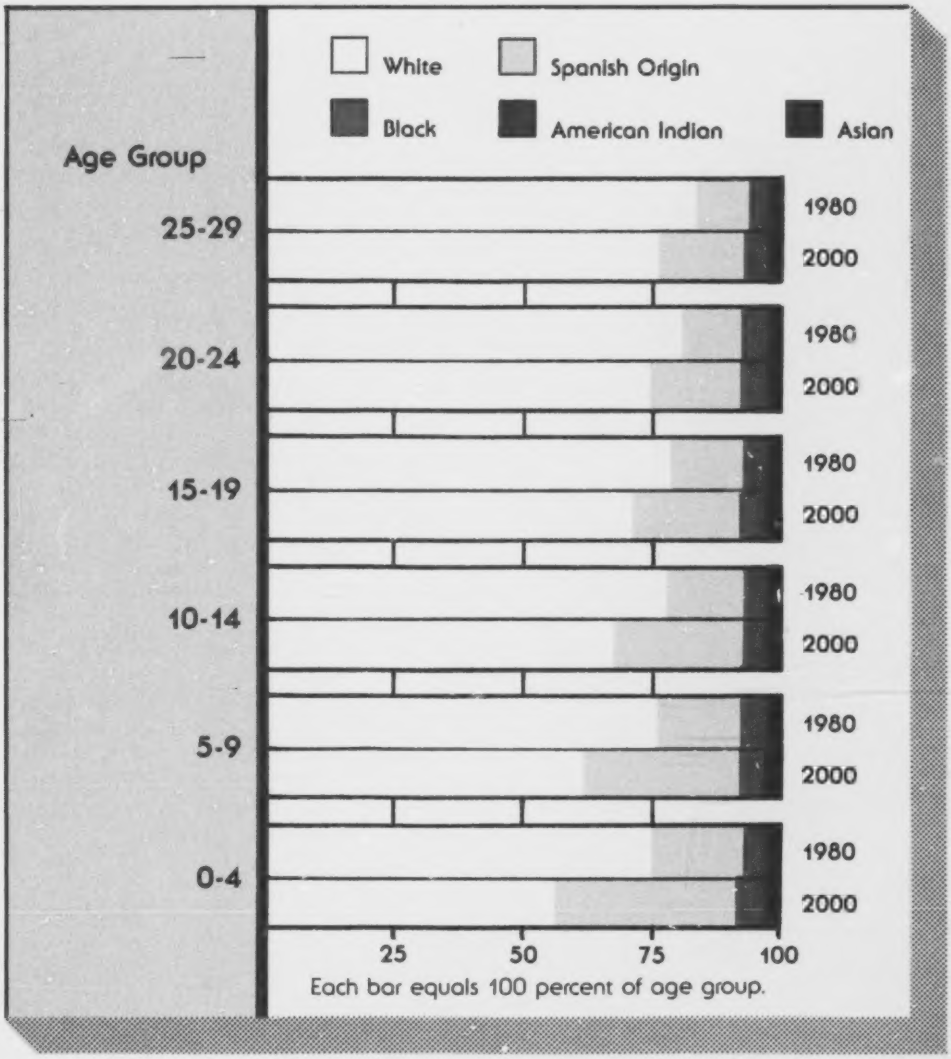
# Exhibit 3

## School and College-Age Population by Race and Spanish Origin, 1980 (Actual) and 2000 (Projected)

This exhibit shows the distribution of people of school age by race and Spanish origin for 1980 and a projection for the year 2000. The projection is based on a regression analysis of age cohort groups from the 1980 census.

- Exhibit 3 shows that the Spanish-origin population tends to be highly concentrated in the younger age groups. Although people of Spanish origin constituted 11.8 percent of the total population of Colorado in 1980, they accounted for 18, 17, and 16 percent respectively of the three youngest age groups.
- By the year 2000, children of Spanish origin are projected to account for 24.5, 23, and 21.5 percent respectively of the three youngest age groups.
- While the numbers of Black, Asian, and American Indian children will not be as large as the Spanish-origin group, the percentages of racial minority children in the youngest age groups are expected to rise steadily.

## Exhibit 3
## School and College-Age Population by Race and Spanish Origin, 1980 (Actual) and 2000 (Projected)



Source: Kaufman et al., 1983, Tables 20 and 22

# Exhibit 4

# Educational Attainment by Race and Spanish Origin of Persons Aged 25 and Over, 1980

Exhibit 4 shows the proportions of the population aged 25 and over that have completed various levels of education. As the levels of educational attainment rise, the proportions of the population reaching those levels decrease. The differences in attainment among racial and ethnic groups are striking. It must be emphasized that school attainment of Colorado adults in 1980 does not necessarily reflect what is taking place among the present generation of students in school, but the educational attainment of parents has been shown to affect the educational choices of their children. Exhibit 5, by presenting information on recent enrollment figures for high school youth, may indicate that minorities' educational attainment is increasing.

- In 1980, Colorado had the highest proportion in the nation (23 percent) of college graduates in its population aged 25 or older and the third highest percentage of high school graduates (78 percent) (American Demographics, 1982).

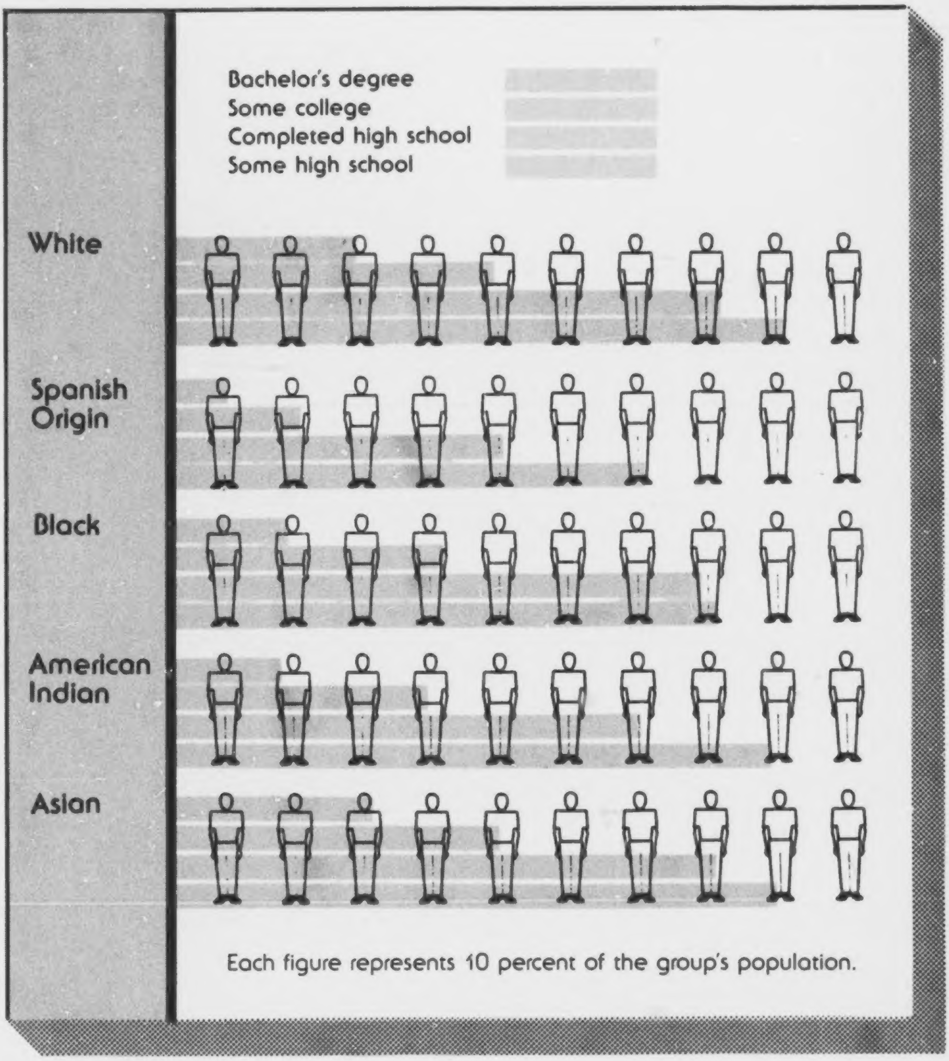
- Although 80 percent of the White population aged 25 or over had completed high school, less than one-half of the Spanish-origin population had attained that level. Of the Black and Asian populations, approximately three-quarters had graduated from high school, and nearly seven-tenths of the American Indian population completed high school.

- Approximately 45 percent of the White, 40 percent of the Black, and 46 percent of the Asian population had completed some college compared with less than 20 percent of the Spanish-origin population.

- The disparity in educational attainment is most striking at the bachelor's degree level or higher. For the White population, 24 percent had completed at least the baccalaureate degree, while 28 percent of the Asian population had attained that level. Among the Black population, nearly 14 percent had earned a bachelor's degree or more, while 12 percent of the American Indian category had completed at least a baccalaureate degree. The proportion of the Spanish-origin population holding at least a bachelor's degree was less than 7 percent.

## Exhibit 4

## Educational Attainment by Race and Spanish Origin of Persons Aged 25 and Over, 1980



Each figure represents 10 percent of the group's population.

**Source:** Kaufman et al., 1983, Table CO-4

## Exhibit 5

## Persistence in High School of Colorado Ninth Graders, Fall 1979 to Fall 1982 (Public Schools Only)

Exhibit 5 presents the percentage of fall 1979 ninth graders in Colorado public schools who were enrolled as tenth graders in fall 1980, eleventh graders in fall 1981, and twelfth graders in fall 1982. While these figures are not identical to rates of persistence for the various racial and ethnic groups through the start of the twelfth grade, they may serve as an indicator or a relative measure of persistence. The numbers of American Indian and Asian students in Colorado are too small to imply persistence from the data. In-migration has caused the absolute numbers of Black students in the tenth and eleventh grade groups to increase. Data on graduation rates are not available.

- This exhibit implies that Hispanics have higher dropout rates than Whites or Blacks and that these students appear to drop out earlier. While White eleventh graders equalled almost 96 percent of White ninth grade enrollments two years earlier, Hispanic eleventh graders totalled 86 percent of their cohort.

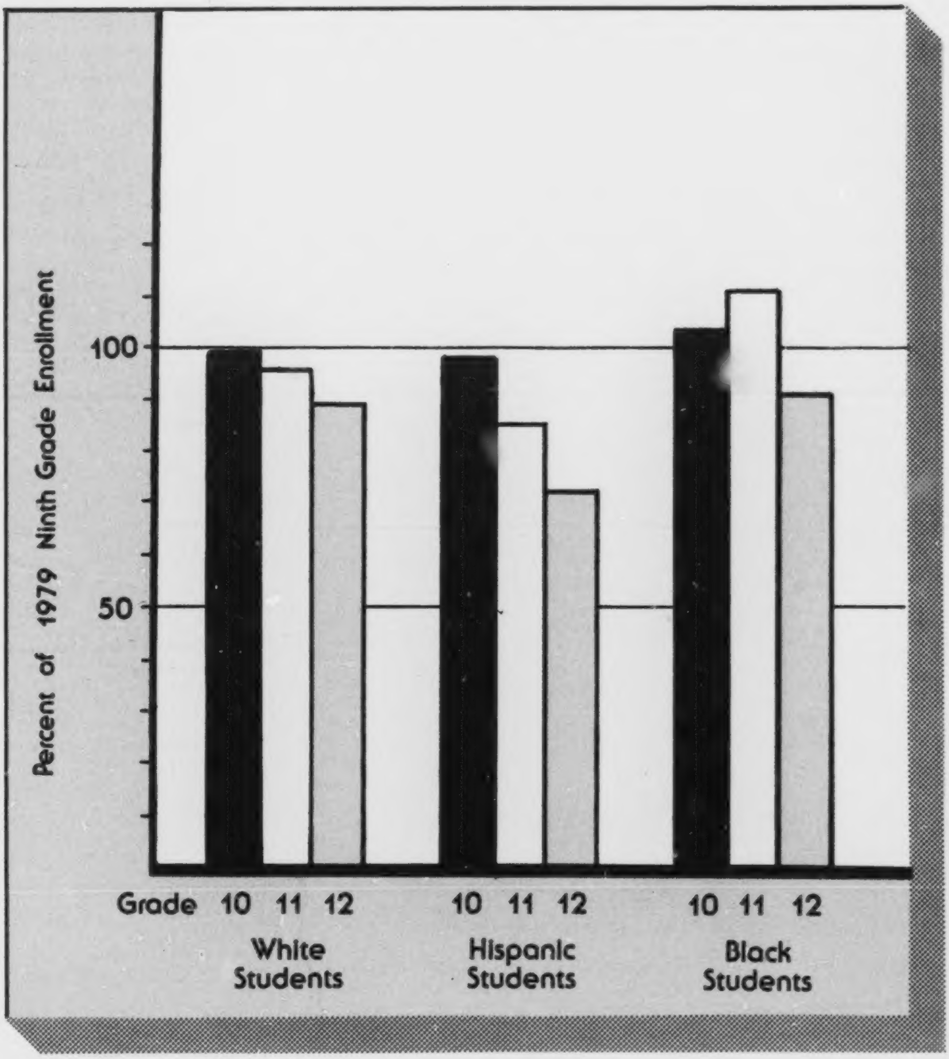
- The number of Hispanic high school seniors in 1982 comprised 72 percent of the number of ninth graders three years earlier as opposed to 91 percent for Blacks and 89 percent for Whites.

- Thus, it is clear that a sizeable part of Hispanic youth, relative to others, will not complete high school and be eligible to enter college.

- These figures appear to be similar to nationwide figures, which show the "leakage" of minorities from the "educational pipeline." Nationally, 83 percent of White students over the period from 1973 to 1979 completed high school compared with 72 percent of Black students and 55 percent of Hispanics (Astin, 1982).

## Exhibit 5

## Persistence in High School of Colorado Ninth Graders, Fall 1979 to Fall 1982 (Public Schools Only)



**Source:** Western Interstate Commission for Higher Education, 1984

**Note:** Totals for Black tenth and eleventh grade students exceed 100 percent because of in-migration.

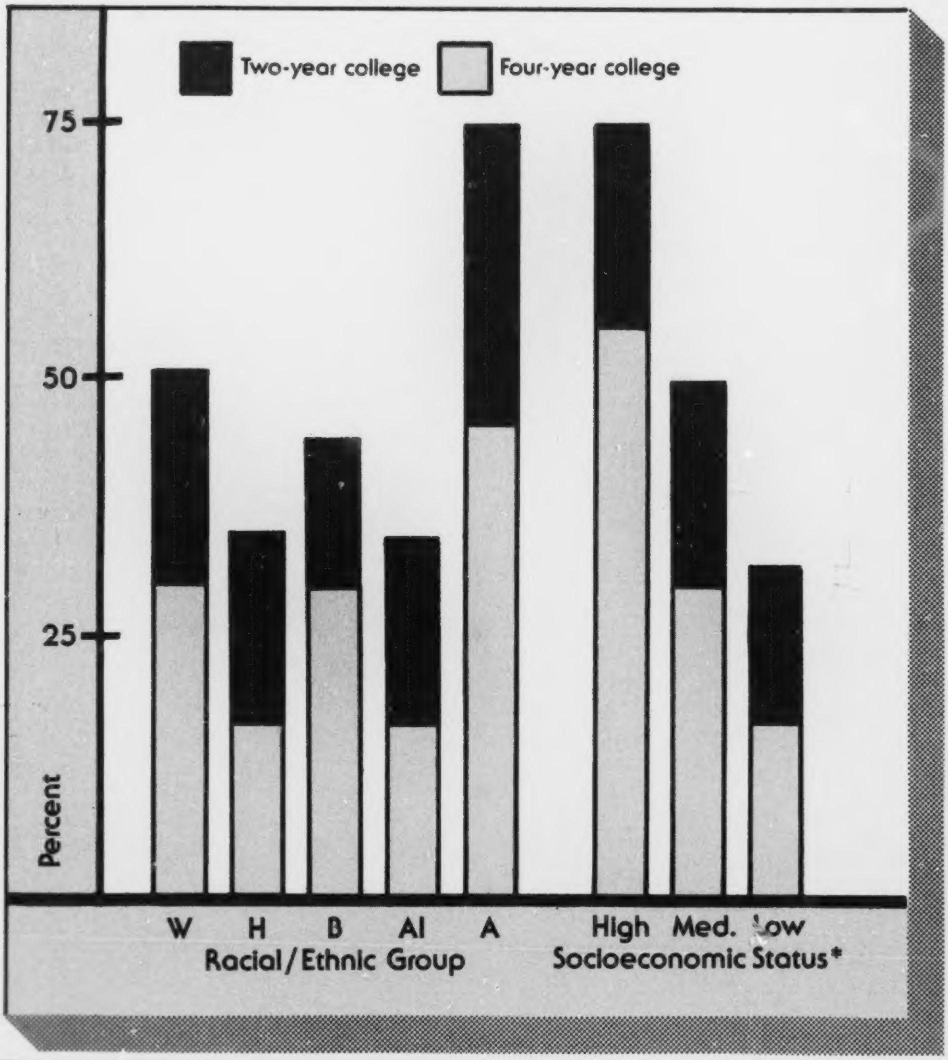
# Exhibit 6
# Percentage of 1980 U.S. High School Seniors Subsequently Enrolled in College

Taken together, Exhibits 6 and 7 illustrate the relationships among race and/or ethnicity, family income, and college attendance. State-by-state data on college enrollment rates are not available, but Exhibit 6 displays the results of a national survey relating to the percentage of 1980 high school graduates who enrolled in college during the next several years. It should be recognized that this was a national survey with limited generalization to the population of specific states. The survey did show that attendance patterns in the West were different from other regions. Although approximately the same percentage of western high school seniors attended college as seniors from other regions of the U.S., a greater percentage of students from the West attended two-year colleges than students from the other regions (28 percent in the West compared with 14 percent in the Northeast and 16 percent in the North Central states and the South).

- The five bars on the left of the exhibit show the college attendance patterns for the racial and Spanish-origin groups. White and Black students attended four-year institutions in approximately the same proportions, but a greater proportion of Whites than Blacks attended two-year institutions, which accounts for the greater overall college-going rate for Whites. Compared with the other groups, American Indian and Spanish-origin students attended two-year colleges in relatively large proportions and four-year colleges in low proportions. Attendance at both two-year and four-year institutions by students of Asian ancestry was far greater than for any other racial or origin group.

- Attendance patterns vary according to socioeconomic status (SES), which is measured by a composite of parental education, family income, father's occupation, and household characteristics. High SES students are more likely to attend postsecondary educational institutions at all levels than those with lower SES.

## Exhibit 6
## Percentage of 1980 U.S. High School Seniors Subsequently Enrolled in College



Source: National Center for Education Statistics, 1984

*Socioeconomic status is measured by a composite of parental education, family income, father's occupation, and household characteristics.

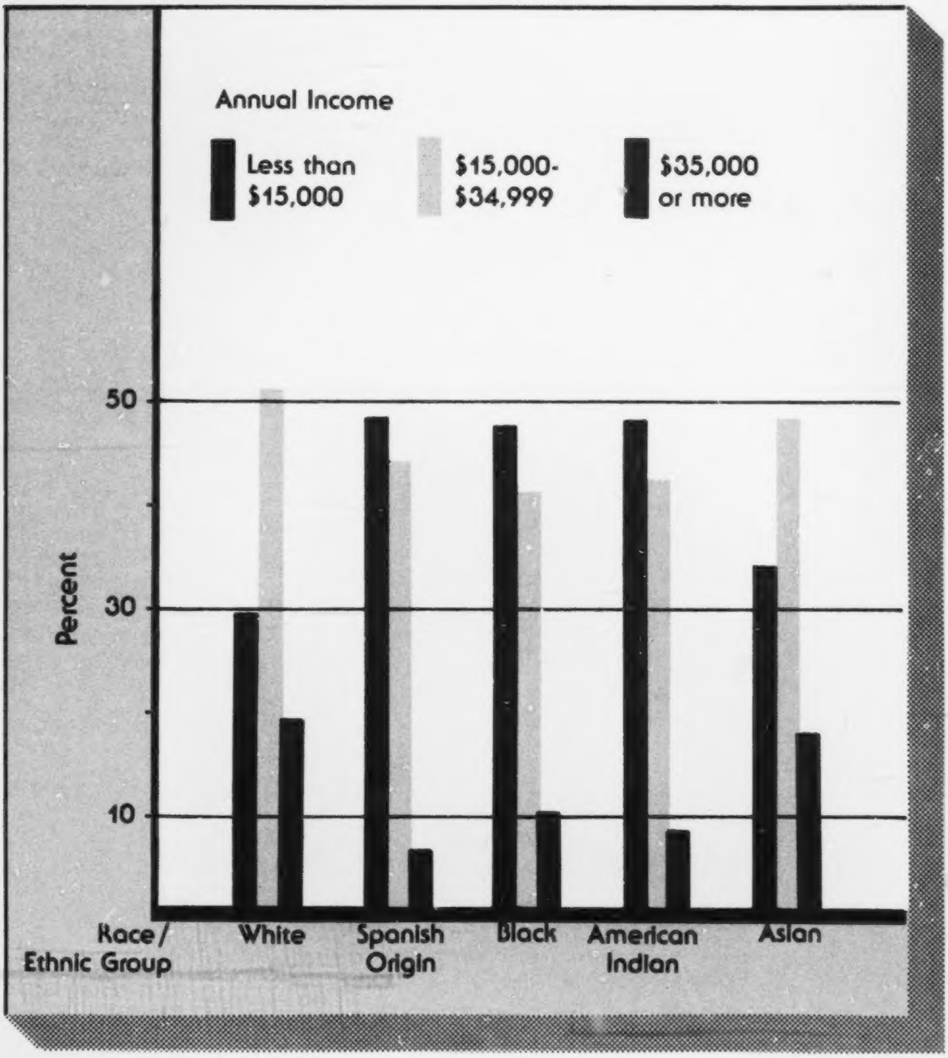
## Exhibit 7

## Colorado Family Income by Race and Spanish Origin, 1979

Exhibit 7 shows the percentages of the population with family incomes in three ranges: less than $15,000 per year; $15,000 to $34,999 per year; and $35,000 or more per year. The distribution for each racial or ethnic group is illustrated.

- Large proportions of the Black, Spanish-origin, and American Indian populations come from families earning under $15,000 per year, and small proportions of those groups come from families earning $35,000 or more.
- Family income levels for the White and Asian populations are similar: compared with the other racial or ethnic groups, relatively low percentages earn less than $15,000 and higher percentages earn more than $35,000.
- This exhibit illustrates the relatively low economic status of Blacks, American Indians, and people of Spanish origin in Colorado compared with Whites and Asians.
- These figures, when combined with the general information on student attendance patterns presented in Exhibit 6, demonstrate the important connection between economic status and education.

## Exhibit 7
## Colorado Family Income by Race and Spanish Origin, 1979



Source: Kaufman et al., 1983, Table CO-6

# Exhibits 8A-8E
# Postsecondary Enrollment
# Compared with Representation in the Population, 1980

Figures 8A-8E display the composition of postsecondary enrollments by race and ethnicity compared with each group's representation in the college-age population (aged 20-29). Each exhibit uses bars to portray the proportion of one racial or ethnic group enrolled in each of the four levels of postsecondary education. The bars are superimposed upon a background field representing that group's proportion of the college-age population. Thus, the reader can determine whether a group is well represented among postsecondary students in proportion to its representation in the population.

- The White proportion of enrollments at all levels of postsecondary education is greater than the White proportion of the college-age population in general. The White proportion of two-year college enrollment is only slightly greater than the White share of the college-age population, but White representation increases at the four-year, graduate, and first professional levels.

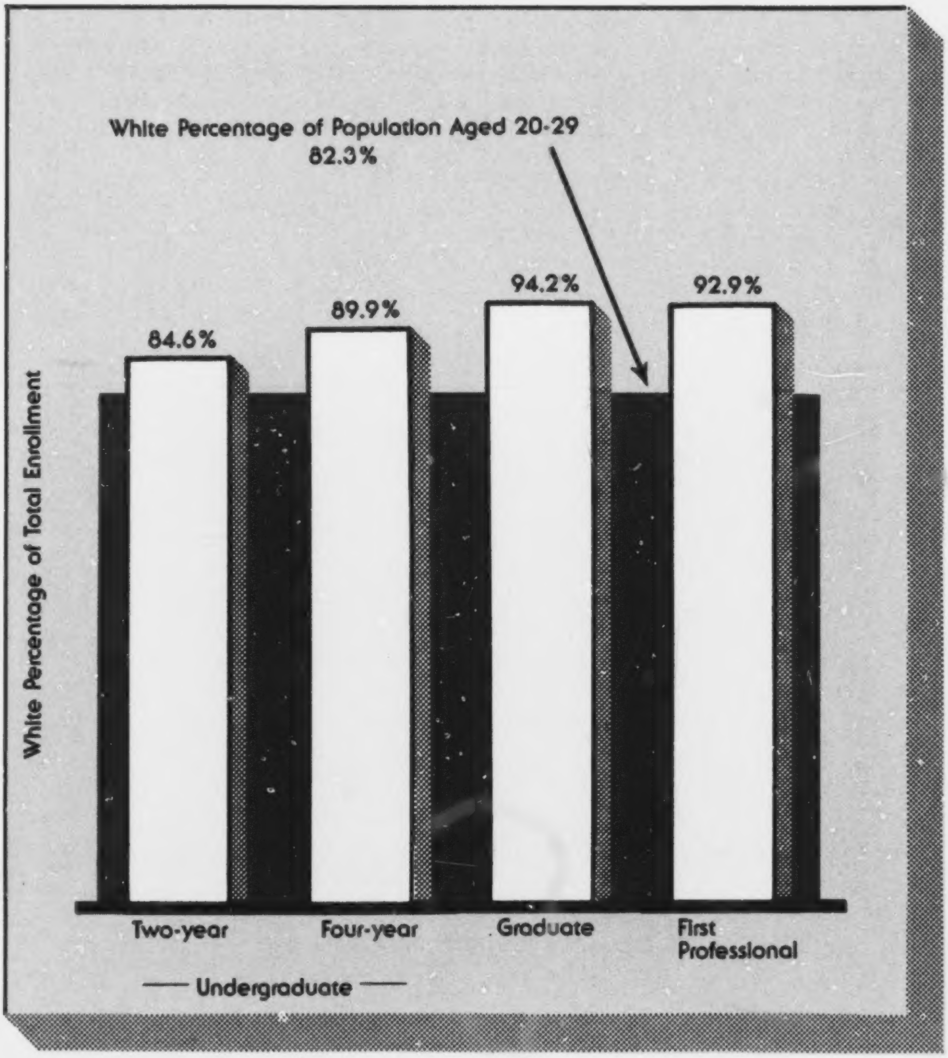
- Hispanics are underrepresented at all levels of postsecondary education, especially at the graduate level, where the proportion of Hispanic enrollment is one-quarter as large as the Spanish-origin proportion of the college-age population in Colorado.

- The Black proportion of two-year college enrollment is slightly greater than the proportion of Blacks in the population. Black representation decreases at the more advanced levels, so that the proportion of Black enrollment in graduate schools is approximately one-third the size of the group's proportion of the college-age population, and first professional Black enrollment is 41 percent of the group's proportion of the population.

- American Indians are well represented at the two-year and four-year levels, where they make up 1.2 percent and 0.7 percent respectively of the enrollments and 0.7 percent of the college-age population. They are underrepresented at the higher levels, however: the American Indian proportion of graduate enrollment is just over one-half of its proportion of the college-age population and nearly nine-tenths of its population proportion at the first professional level.

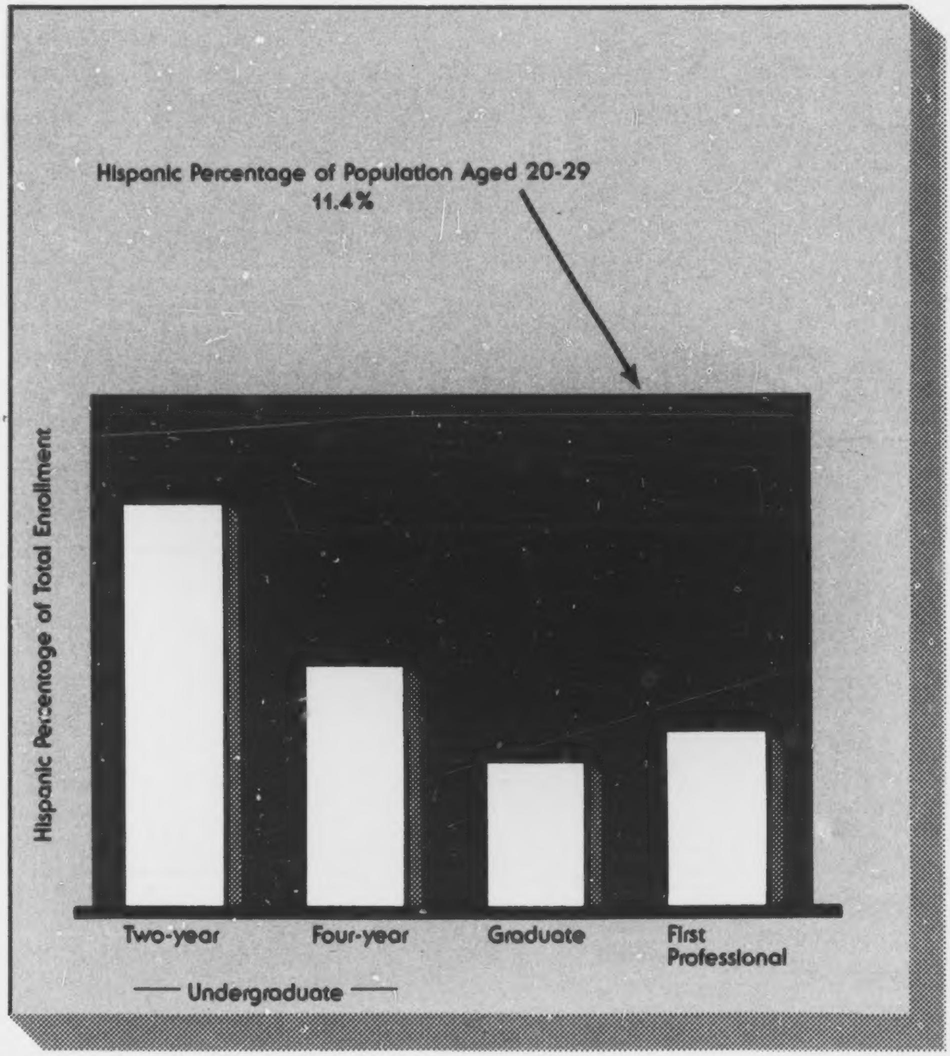
- Asians are well represented at all levels of higher education. At the two-year level the proportion of Asians enrolled is equal to their proportion of the college-age population. The Asian proportion of enrollments in four-year schools is one-third greater than the Asian proportion of the state's college-age population, and the Asian proportion of enrollments is 8 percent higher at the graduate and first professional degree levels.

## Exhibit 8A
## White Postsecondary Enrollments Compared with Representation in the Population, 1980



**Source:** Kaufman et al., 1983, Tables 7 and 22

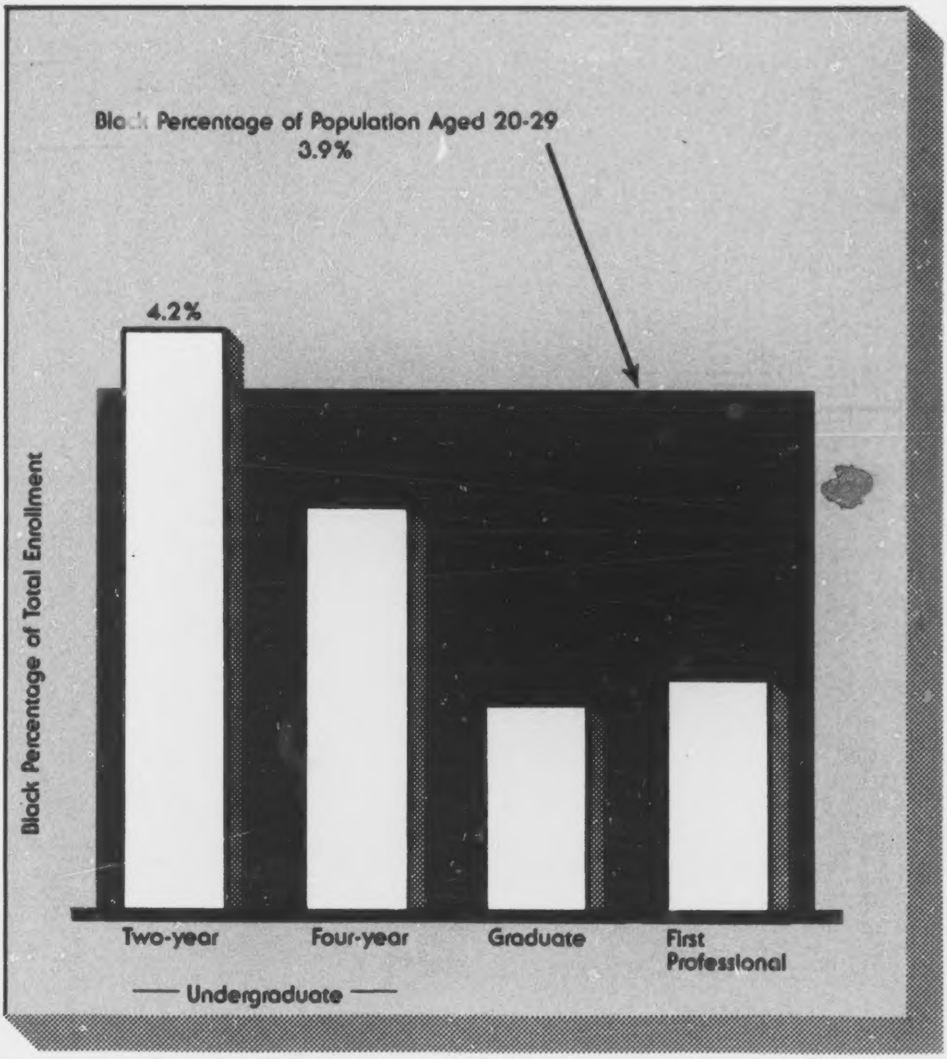
# Exhibit 8B
## Hispanic Postsecondary Enrollments Compared with Representation in the Population, 1980



Source: Kaufman et al., 1983, Tables 7 and 22

## Exhibit 8C

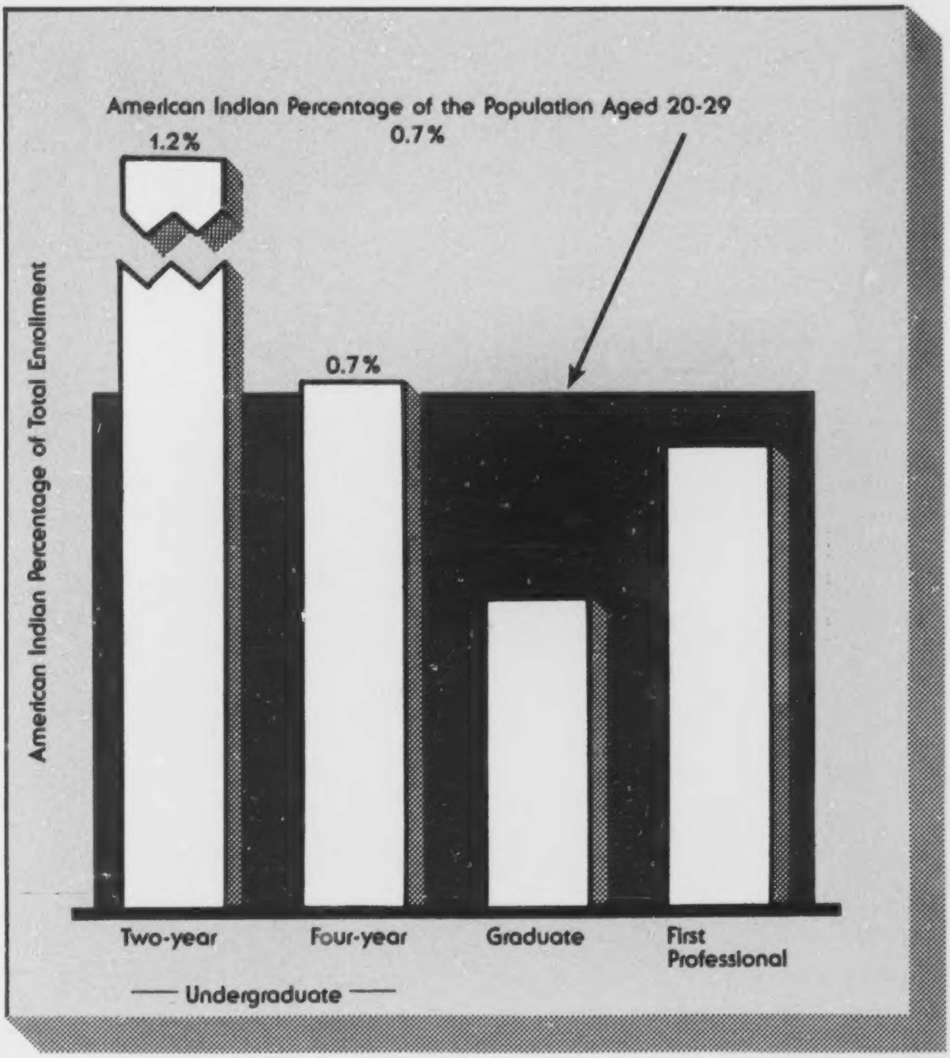
## Black Postsecondary Enrollments Compared with Representation in the Population, 1980



**Source:** Kaufman et al., 1983, Tables 7 and 22

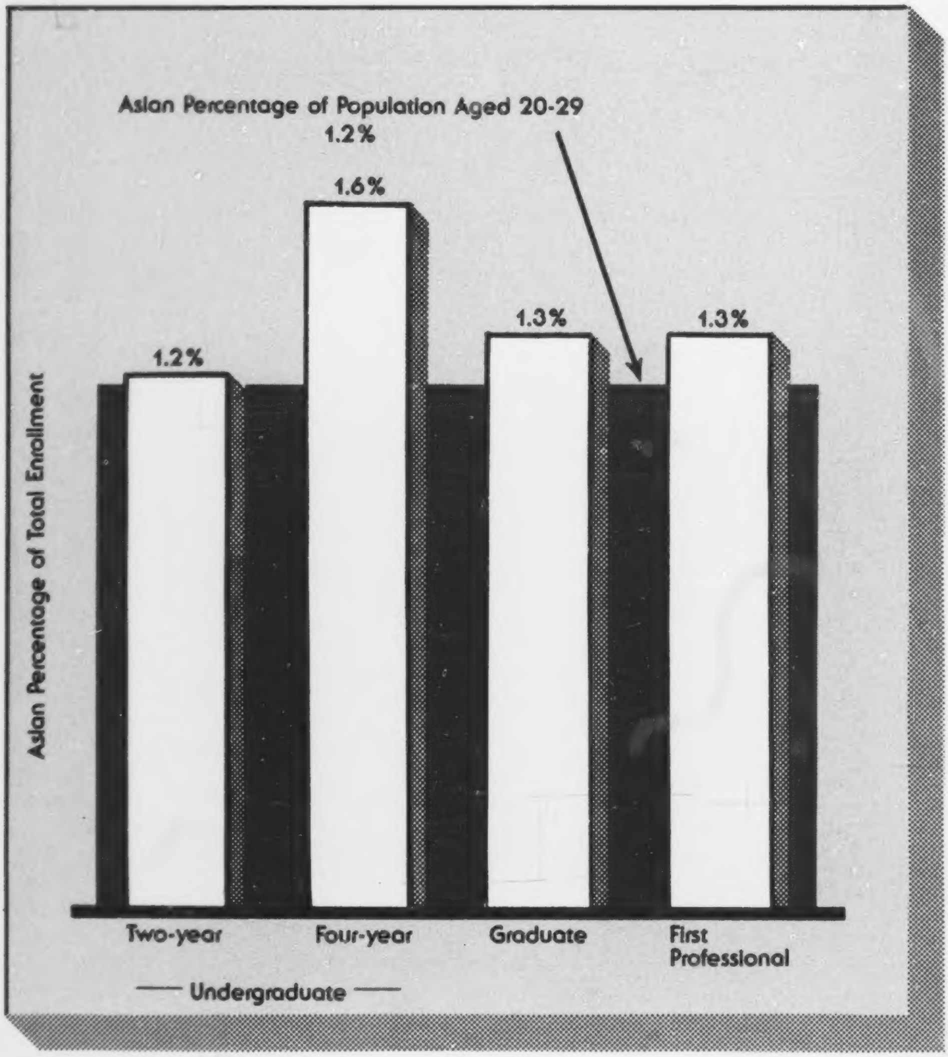
## Exhibit 8D

## American Indian Postsecondary Enrollments Compared with Representation in the Population, 1980



Source: Kaufman et al., 1983, Tables 7 and 22

## Exhibit 8E
## Asian Postsecondary Enrollments Compared with Representation in the Population, 1980



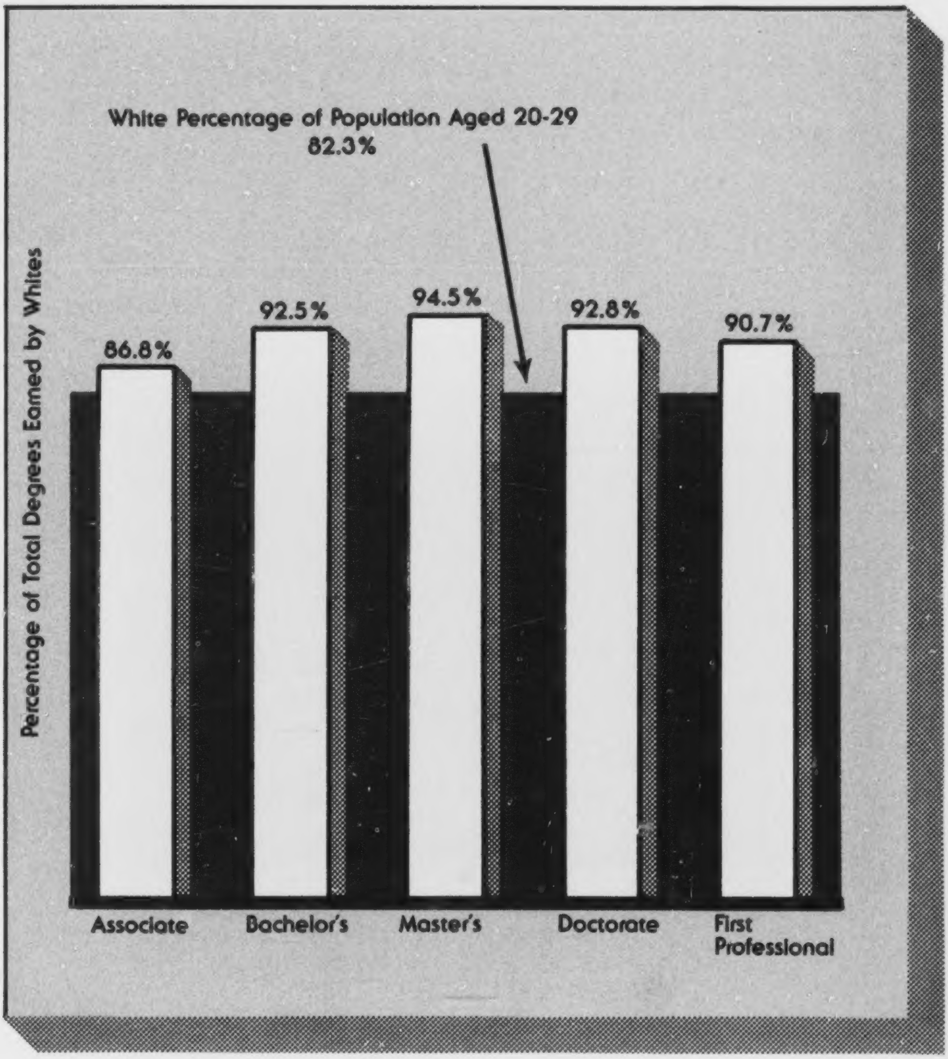
Source: Kaufman et al., 1983, Tables 7 and 20

# Exhibits 9A-9E
# Earned Degrees
## Compared with Representation in the Population, 1980-81

Figures 9A-9E display the distribution among racial and ethnic groups of earned degrees at five levels (associate, bachelor's, master's, doctoral, and first professional) with each group's representation in the college-age population (aged 20-29). Each exhibit uses bars to portray the proportion of earned degrees by one racial or ethnic group in each of the five levels of postsecondary education. The bars are superimposed upon a background field representing that group's proportion of the college-age population. Thus, the reader can determine whether a group is well represented in earned degrees in proportion to its representation in the population.

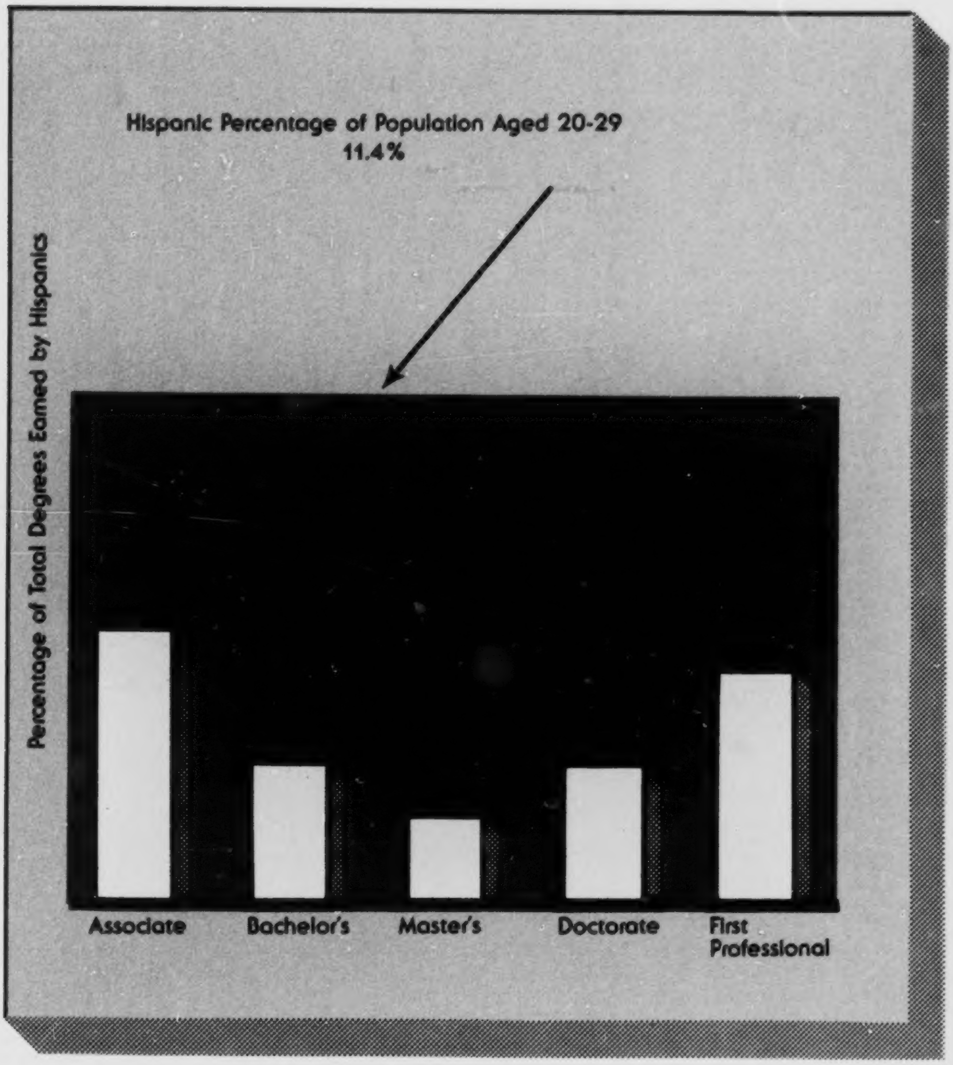
- In general, when the proportions of degrees awarded to members of minority groups are compared with the proportions of college-age population, the overall pattern of underrepresentation of minorities, especially at the baccalaureate and higher levels, is similar to that in enrollments.
- The White proportion of those earning degrees at all levels of postsecondary education is greater than the White proportion of the college-age population in general. The White proportion of two-year degrees is only slightly greater than the proportion of Whites in the college-age population, but the White proportion increases at the four-year, graduate, and first professional levels.
- Hispanics are underrepresented in earned degrees at all levels of postsecondary education. At the two-year degree level, the proportion of degrees earned by Hispanic students is slightly greater than one-half the size of the Spanish-origin proportion of the college-age population in the state. At the other degree levels, the proportions of degrees earned by Hispanic students is less than one-half as large as the Spanish-origin proportion of the college age-population.
- The Black proportion of two-year college degrees is slightly less than the proportion of Blacks in the population. Black representation decreases at the more advanced levels, so that the proportions of degrees earned by Black students are approximately one-half the size of the Black college-age population.
- American Indians are well represented at the two-year and first professional levels, but at the other degree levels, the proportions of degrees earned by American Indians are approximately one-half the size of the American Indian proportion of the college-age population in Colorado.
- Asians are well represented at the associate, bachelor's, and master's degree levels. The proportions of degrees earned by Asian students at the doctoral and first professional levels, however, are lower than the Asian proportion of the college-age population in Colorado.

## Exhibit 9A
## Degrees Earned by Whites Compared with Representation in the Population, 1980



**Source:** Kaufman et al., 1983, Tables 12 and 22

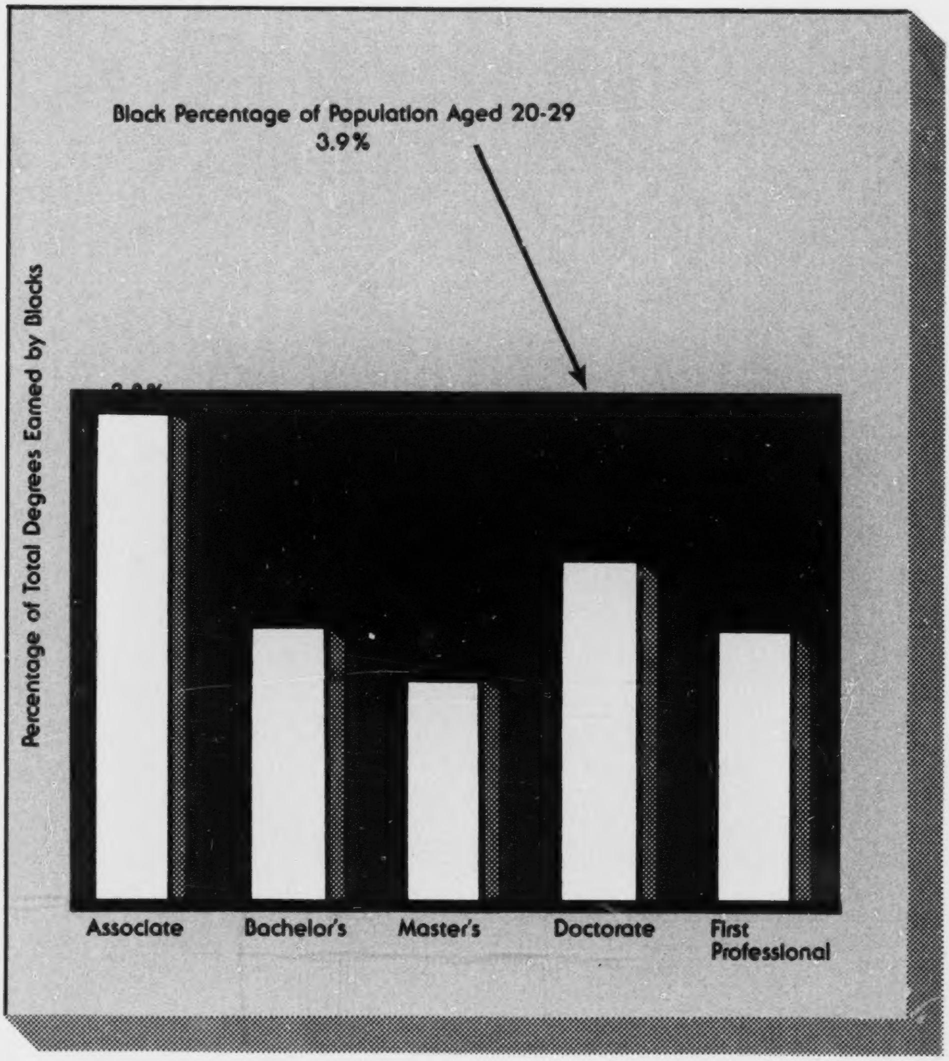
## Exhibit 9B
## Degrees Earned by Hispanics Compared with Representation in the Population, 1980



**Source:** Kaufman et al., 1983, Tables 12 and 22

## Exhibit 9C

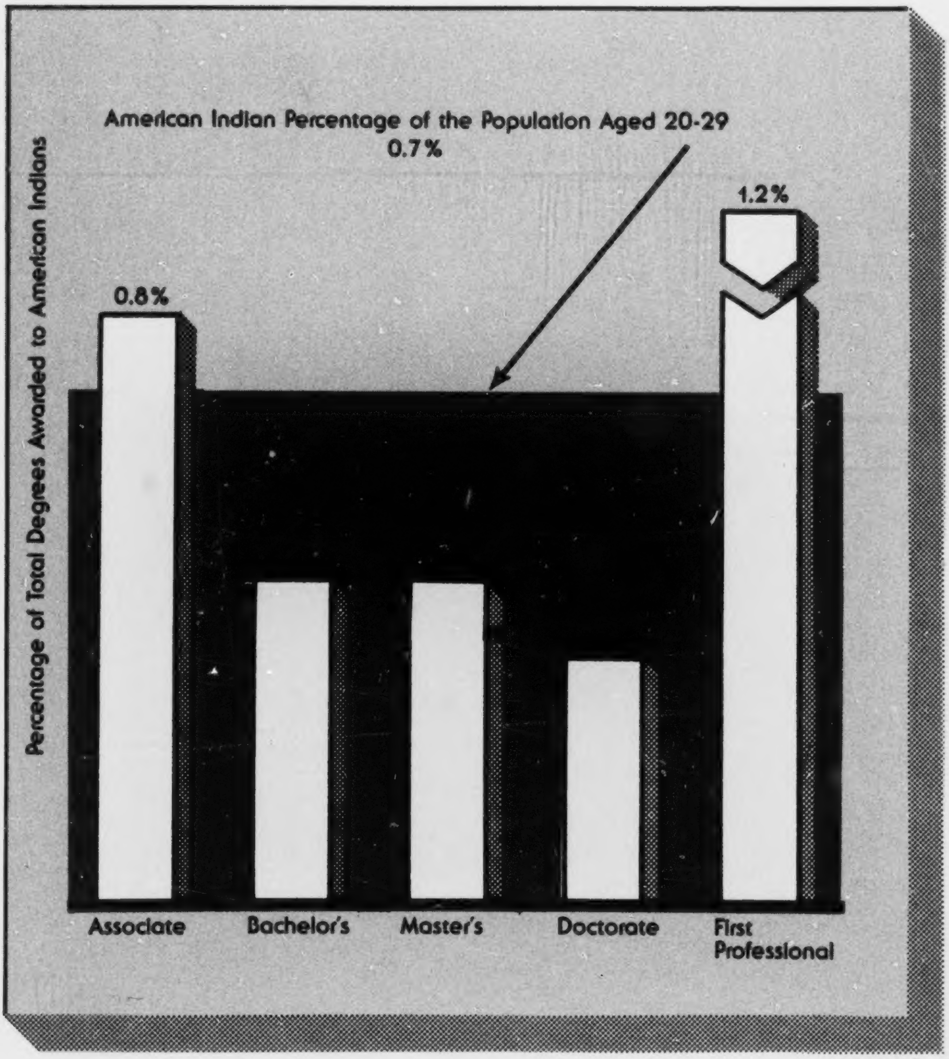
## Degrees Earned by Blacks Compared with Representation in the Population, 1980



Source: Kaufman et al., 1983, Tables 12 and 22

## Exhibit 9D

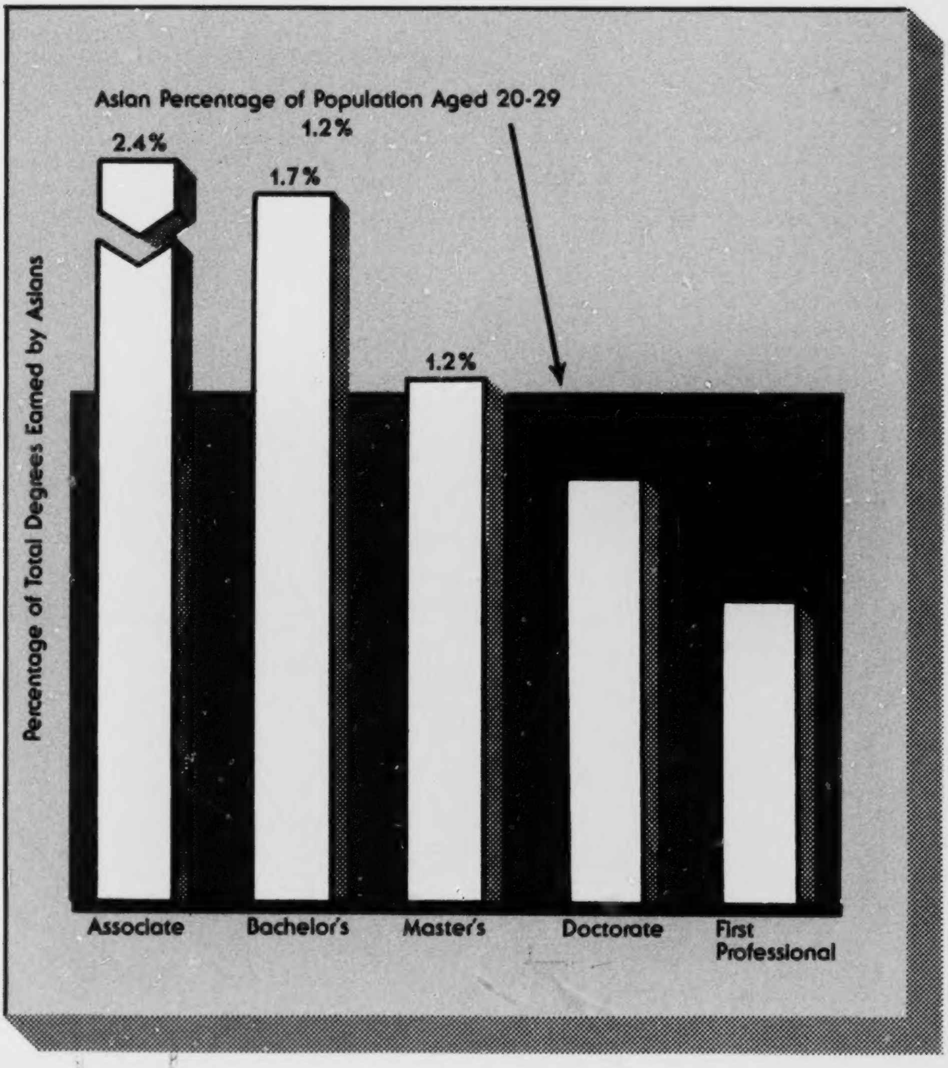
## Degrees Earned by American Indians Compared with Representation in the Population, 1980



Source: Kaufman et al., 1983, Tables 12 and 22

## Exhibit 9E

## Degrees Earned by Asians Compared with Representation in the Population, 1980



Source: Kaufman et al., 1983, Tables 12 and 20

Exhibit 10

# Earned Degrees by Race and Spanish Origin, 1976-77 to 1980-81

The following table presents the number of degrees awarded at five levels (associate, bachelor's, master's, doctoral, and first professional) by racial or ethnic group. At the doctoral and first professional levels, interpretation is difficult because such small numbers of degrees are awarded to minority students that year-to-year fluctuations appear as substantial percentage changes.

- Overall, except for an increase in first professional degrees of more than 17 percent and a decrease in master's degrees of more than 6 percent, there has been relatively little change in the numbers of degrees awarded in Colorado from the 1976-77 to the 1980-81 school years.
- Hispanic students have earned significantly fewer degrees at all levels except the first professional, at which level the number of degrees awarded more than doubled from 1976-77 to 1980-81.
- Black students earned more bachelor's, master's, and first professional degrees in 1980-81 than in 1976-77 but markedly fewer associate and doctoral degrees.
- The number of American Indian students earning degrees at all levels in Colorado is small, but they earned substantially more degrees in 1980-81 than in 1976-77 at all levels except the bachelor's, at which level they earned slightly fewer degrees.
- In 1980-81 Asian students earned substantially more associate, bachelor's and master's degrees than they did in 1976-77. But the group earned the same number of first professional degrees in 1980-81 as in 1976-77 and nearly 65 percent fewer doctorates.

# Exhibit 10

## Earned Degrees by Race and Spanish Origin, 1976-77 to 1980-81

| | Degrees Awarded 1976-77 | Degrees Awarded 1978-79 | Percent Change 1976-78 | Degrees Awarded 1980-81 | Percent Change 1978-80 | Percent Change 1976-80 |
|---|---|---|---|---|---|---|
| **State Totals** | | | | | | |
| Associate | 4,338 | 4,652 | 7.2 | 4,355 | -6.4 | 0.4 |
| Bachelor's | 14,208 | 13,864 | -2.4 | 14,677 | 5.9 | 3.3 |
| Master's | 5,130 | 4,853 | -5.4 | 4,811 | -0.9 | -6.2 |
| Doctorate | 703 | 655 | -6.8 | 711 | 8.5 | 1.1 |
| First Professional | 716 | 722 | 0.8 | 839 | 16.2 | 17.2 |
| **White Students** | | | | | | |
| Associate | 3,667 | 3,916 | 6.8 | 3,653 | -6.7 | -0.4 |
| Bachelor's | 12,973 | 12,625 | -2.7 | 13,327 | 5.6 | 2.7 |
| Master's | 4,629 | 4,363 | -5.7 | 4,218 | -3.3 | -8.9 |
| Doctorate | 539 | 540 | 0.2 | 557 | 3.1 | 3.3 |
| First Professional | 671 | 663 | -1.2 | 758 | 14.3 | 13.0 |
| **Hispanic Students** | | | | | | |
| Associate | 357 | 348 | -2.5 | 258 | -25.9 | -27.7 |
| Bachelor's | 587 | 562 | -4.3 | 457 | -18.7 | -22.1 |
| Master's | 178 | 122 | -31.5 | 94 | -23.0 | -47.2 |
| Doctorate | 46 | 9 | -80.4 | 19 | 111.1 | -58.7 |
| First Professional | 21 | 30 | 42.9 | 44 | 46.7 | 109.5 |
| **Black Students** | | | | | | |
| Associate | 204 | 215 | 5.4 | 160 | -25.6 | -21.6 |
| Bachelor's | 276 | 263 | -4.7 | 313 | 19.0 | 13.4 |
| Master's | 68 | 72 | 5.9 | 79 | 9.7 | 16.2 |
| Doctorate | 25 | 9 | -64.0 | 16 | 77.8 | -36.0 |
| First Professional | 14 | 14 | 0.0 | 18 | 28.6 | 28.6 |
| **American Indian Students** | | | | | | |
| Associate | 25 | 21 | -16.0 | 34 | 61.9 | 36.0 |
| Bachelor's | 67 | 60 | -10.4 | 65 | 8.3 | -3.0 |
| Master's | 11 | 13 | 18.2 | 21 | 61.5 | 90.9 |
| Doctorate | 1 | 4 | 300.0 | 2 | -50.0 | 100.0 |
| First Professional | 2 | 5 | 150.0 | 10 | 100.0 | 400.0 |
| **Asian Students** | | | | | | |
| Associate | 56 | 62 | 10.7 | 103 | 66.1 | 83.9 |
| Bachelor's | 157 | 178 | 13.4 | 238 | 33.7 | 51.6 |
| Master's | 43 | 39 | -9.3 | 53 | 35.9 | 23.3 |
| Doctorate | 17 | 8 | -52.9 | 6 | -25.0 | -64.7 |
| First Professional | 6 | 9 | 50.0 | 6 | -33.3 | 0.0 |

Source: Kaufman et al, 1983, Tables 12, 13, 14

# References

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Western Interstate Commission for Higher Education. 1984. The data upon which Exhibit 5 is based was gathered as background information for McConnell and Kaufman, 1984, cited above.

6.4

# Minorities in Higher Education: The Changing Southwest

## Texas

A report prepared by the WICHE Information Clearinghouse in cooperation with the Western Regional Office of the College Board and with the support of the Atlantic Richfield Foundation

Geoffrey Dolman, Jr.
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Western Interstate Commission for Higher Education WICHE
The College Board

# WICHE

WICHE, the Western Interstate Commission for Higher Education, is a nonprofit regional organization. It helps the thirteen member states to work together to provide high-quality, cost-effective programs to meet the education and manpower needs of the West. Member states are Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming. Through its Information Clearinghouse, WICHE provides information to assist higher education and governmental policy makers in the West.

This series of reports includes the following publications:

Minorities in Higher Education: The Changing Southwest (Arizona), publication no. 2A134a

Minorities in Higher Education: The Changing Southwest (California), publication no. 2A134b

Minorities in Higher Education: The Changing Southwest (Colorado), publication no. 2A134c

Minorities in Higher Education: The Changing Southwest (New Mexico), publication no. 2A134d

Minorities in Higher Education: The Changing Southwest (Texas), publication no. 2A134e

Graphics by Scott Knauer

Published September 1984
Western Interstate Commission for Higher Education
P.O. Drawer P
Boulder, Colorado 80302
Telephone: (303) 497-0200
An Affirmative Action/Equal Opportunity Employer
Publication Number 2A134e
Printed in the United States of America
35-100-540-000-401:6C:984:ROB:2A134e

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# Foreword

Sometimes we may become aware of societal trends without recognizing their potential effects on our social institutions. At other times, we may fail to respond adequately to social changes, even though we are aware that they are taking place. Among the virtues of our society are both the tendency toward self-correction--to make adjustments in our social institutions so that they function effectively—and the tendency toward making adjustments that anticipate needed changes and that, in a sense, preempt the need for self-correction.

As data in this and companion reports show, the current levels of education and income achieved by racial and ethnic minorities fall below that of Whites. This imbalance in economic and educational attainment, plus the rapid growth in the population of racial and ethnic minority groups, raises important issues for education and government policy makers in each state. It is the intent of this report to help focus the discussion on these issues and to encourage appropriate responses.

WICHE is grateful to the organizations and individuals who have worked with us on this important project. The College Board cosponsored the study and provided assistance and advice at several stages. The Atlantic Richfield Foundation provided additional financial support. A regional advisory committee, whose members are listed on the following page, provided valuable assistance in preparing these reports and helped develop a strategy for disseminating the results of the study.

September 1984

Phillip Sirotkin
Executive Director
Western Interstate Commission
for Higher Education

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# Introduction

This series of state reports is intended to highlight the implications for educational planning of the changing demography of the Southwest. This project is the outgrowth of an earlier report, which was prepared to provide background data for a regional higher education conference on minority access and retention in higher education (Kaufman et al., 1983).

The decision to concentrate on minorities in higher education in the southwestern states follows from several conclusions that have been well documented.

- Certain racial and ethnic minorities have been underrepresented in higher education relative to nonminorities. This is especially true of Hispanic students, who are well represented, proportionally and numerically, in the population of these states.
- These minorities are even less well represented among college and professional school graduates.
- Increases in the proportion of racial and ethnic minorities among successive age cohorts present a challenge to educators and policy makers concerned with reversing these patterns of underrepresentation.

The reports focus on each of five southwestern states (Arizona, California, Colorado, New Mexico, and Texas) individually in order to call attention to the most important findings in each state.

As college-age populations in these five southwestern states grow in terms of both the numbers and percentages of ethnic minority individuals, policy makers will be faced with a number of serious educational and political questions. For example:

- Are current approaches to provision of educational opportunity--for all seeking it, regardless of ethnic background--sufficient, now and for the future?
- What are the implications for higher education and for institutions' program and resource "mix" of the growing minority share of the college-age population and the simultaneous decline (in some states) of the proportion of Whites in the same age groups?

- What are the implications of the growth of these minority populations for the economies of the states and their supplies of highly trained manpower, given the current distribution of minority students throughout the educational system (by institutional level and type, for example)?
- What are the implications for the higher education institutions of the current pattern of distribution of minority students, given the changes in the composition of the college-age group?
- If the educational patterns of minority students remain unchanged as their numbers grow, what are the possible social and political consequences?

These questions are meant only to suggest the seriousness and complexity of policy issues that need attention. The hope of the organizations publishing the report is that its contents will be useful as these challenging questions are addressed.

## Definitions

The information in these reports comes primarily from two sources: the 1980 census of the population and related surveys by the United States Bureau of the Census provided population and demographic data, and the Higher Education General Information Survey (HEGIS) conducted by the National Center for Education Statistics (NCES) provided education data. Reference to these two sources ensures that there will be comparability in the data presented across states and that other users will have access to the same data sources.

Caution must be used when comparing the two data bases, however, because each source defines racial and ethnic groups differently, with particular impact on the "Hispanic" population group. The HEGIS format designates five racial or ethnic groups: American Indian, Black, Asian, Hispanic, and White. The Census Bureau uses the racial designations American Indian, Black, Asian, Other, and White, plus a further designation "Persons of Spanish Origin" and "Persons not of Spanish Origin," stating that persons of Spanish origin may be of any race. In this report, the Census Bureau data have been reconciled with the HEGIS data format, resulting in the following comparable groups:

| HEGIS | CENSUS |
|---|---|
| American Indian | American Indians, Eskimos, and Aleuts whether of Spanish origin or not |
| Black | Blacks not of Spanish origin |
| Asian | Asian and Pacific Islanders whether of Spanish origin or not |
| Hispanic | Persons of Spanish origin, regardless of race |
| White | White, not of Spanish origin |
| Residual | Total population minus the above (also Other races not of Spanish origin) |

While these breakdowns do not solve all problems of comparability, they appear to work well for the purposes of this report. To keep the terminology short, in all cases Black and White refer to Black not-Hispanic and White not-Hispanic. Exhibits derived from census data refer to the category "Spanish origin," while exhibits derived from HEGIS data use the term "Hispanic" to identify essentially the same group.

It further must be recognized that the terms "Spanish origin" and "Hispanic" aggregate into one group several ethnic groups, e.g., Central American immigrants, Latinos, Mexican Americans, and others, which may vary from state to state. Each of these groups has its own demographic and cultural characteristics. Policy makers may wish to be aware of these different characteristics and of their implications for higher education.

The most recent and reliable data available were used in this report. In some cases more recent data were available, but older information was used because it was comparable with the data for earlier years whereas the newer data were not. Where the racial and ethnic composition of the college-age population is compared with the composition of the student population and the distribution of degrees among racial and ethnic groups (Exhibits 8A-8E and 9A-9E), HEGIS data from 1980 were used for the education information in order to compare them with census data from the same year.

## Summary

- Texas's population is projected to be between 19.1 million and 23.1 million by the year 2000, up from 14.2 million in 1980, a twenty-year growth rate of between 35 and 63 percent. (See Exhibit 1.)
- Nearly 60 percent of the population growth from 1970 to 1980 can be accounted for by in-migration, which is projected to remain high.
- People of Spanish origin accounted for 21 percent of the total population of Texas in 1980, but they accounted for more than 30 percent of the 0-4 age group. (See Exhibits 2 and 3.)
- By 2000, nearly 40 percent of the age 0-4 population is projected to be of Spanish origin. (See Exhibit 3.)
- The other minority groups in Texas are smaller. Blacks represented 11.8 percent of the total population in 1980, American Indians 0.3 percent, Asians 0.9 percent, and all others 0.3 percent. However, the state's Black population is the third largest in the U.S., the Asian the fifth largest, and the American Indian the ninth largest. (See Exhibits 2 and 3.)
- Texas has the twenty-third highest proportion of people aged 25 and older with college degrees. Whites far exceed most minority groups in postsecondary educational attainment. (See Exhibit 4.)
- Data suggest that Hispanics have higher high school dropout rates than Blacks or Whites and tend to leave school earlier. For example, the number of Hispanic high school graduates in spring 1983 was approximately 60 percent the size of Hispanic enrollment in ninth grade in fall 1979, compared with 74.5 and 63.2 percent respectively for Whites and Blacks. (See Exhibit 5.)
- Trends in Texas suggest that high school graduation rates are similar to nationwide figures that show 83 percent of White students completing high school over the period from 1973 to 1979, compared with 72 percent of Black students and 55 percent of Hispanics. (See narrative to Exhibit 5.)
- National data suggest that smaller percentages of students from low-income families enroll in postsecondary education than students from medium- and high-income families. In Texas, relatively high percentages of Spanish-origin and Black families earned less than $15,000 in 1979. (See Exhibits 6 and 7.)
- Present enrollment and earned degree patterns show considerable underrepresentation (relative to their proportions in the college-age population--aged 20-29) for Hispanics and Blacks at all levels of postsecondary education. Generally American Indians and Asians are well represented. (See Exhibits 8A-8E and 9A-9E.)
- From 1976-77 to 1980-81, Hispanics and Blacks have experienced greater than average declines in degrees awarded at the associate, master's, and doctoral levels and greater than average increases at the bachelor's and first professional levels. (See Exhibit 10.)
- In summary, the greatest population growth in the next twenty years will take place among the minority populations, whose rates of postsecondary educational attainment and socioeconomic status have been low historically.

# Exhibit 1

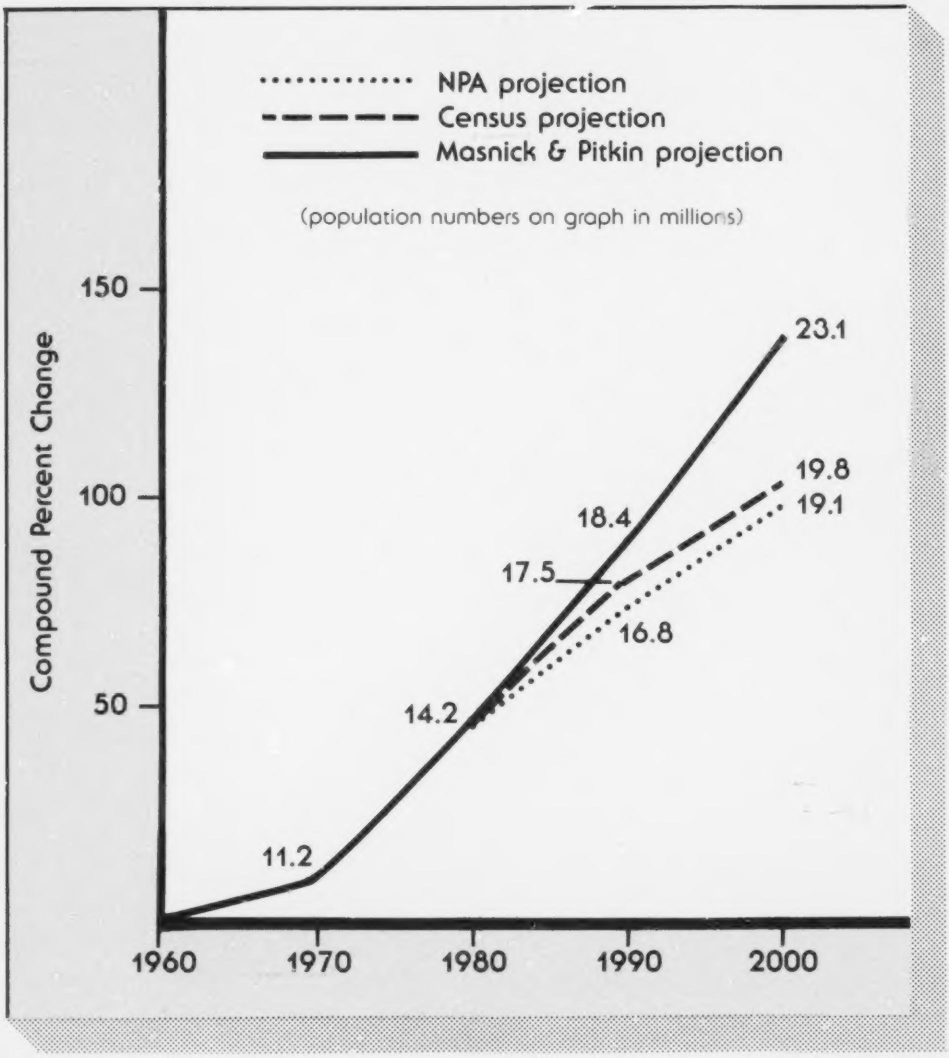
## Population Growth, 1960 to 1980, and Three Projections, 1990 to 2000

## —Texas—

This exhibit shows the actual percentage growth in Texas's population from 1960 to 1980. The dotted, dashed, and solid lines represent three different population projections for 1990 and 2000. These projections are based on mathematical calculations of trends evident today. They do not take into account economic or social factors that may cause the growth rate to accelerate or to slow.

- Texas's population is projected to reach 19.1 million to 23.1 million by the year 2000, up from 14.2 million in 1980. The growth from 1980 to 1990 is estimated to be approximately 18 to 30 percent, and estimates of the overall change from 1980 to 2000 range from 35 to 63 percent.
- During the 1970s, Texas was the tenth fastest growing state in the nation, despite its large population base. In addition, it had the second greatest gain in population during the decade. The Bureau of the Census predicts that Texas will be the eleventh fastest growing state in the 1980s, and the National Planning Association predicts it will be the eighth fastest growing state during the decade (Robey and Russell, 1983).
- Nearly 60 percent of the population growth from 1970 to 1980 can be attributed to in-migration, and the other 40 percent to natural growth (Masnick and Pitkin, 1982). Many of the people migrating to Texas are young adults, who have attained or are approaching those years in which they will be starting families.

## Exhibit 1
## Population Growth, 1960 to 1980, and Three Projections, 1990 to 2000
## —Texas—



**Sources:** Robey and Russell, 1983; U.S. Bureau of the Census, 1970 and 1980; Masnick and Pitkin, 1982.

**Note:** The Masnick and Pitkin projections are plotted as found in their report. Projections for 2000 from the National Planning Association and the Bureau of the Census are estimates calculated by regression analysis using actual population figures from the 1960, 1970, and 1980 censuses and the 1990 projections.

# Exhibit 2
## Population by Race and Spanish Origin, 1980
## —Texas—

Exhibit 2 presents the proportions of racial and ethnic groups in the 1980 population in Texas. Since the data collected on race and Spanish origin in 1970 and 1980 are not comparable, it is not possible to make an accurate comparison between the two censuses.

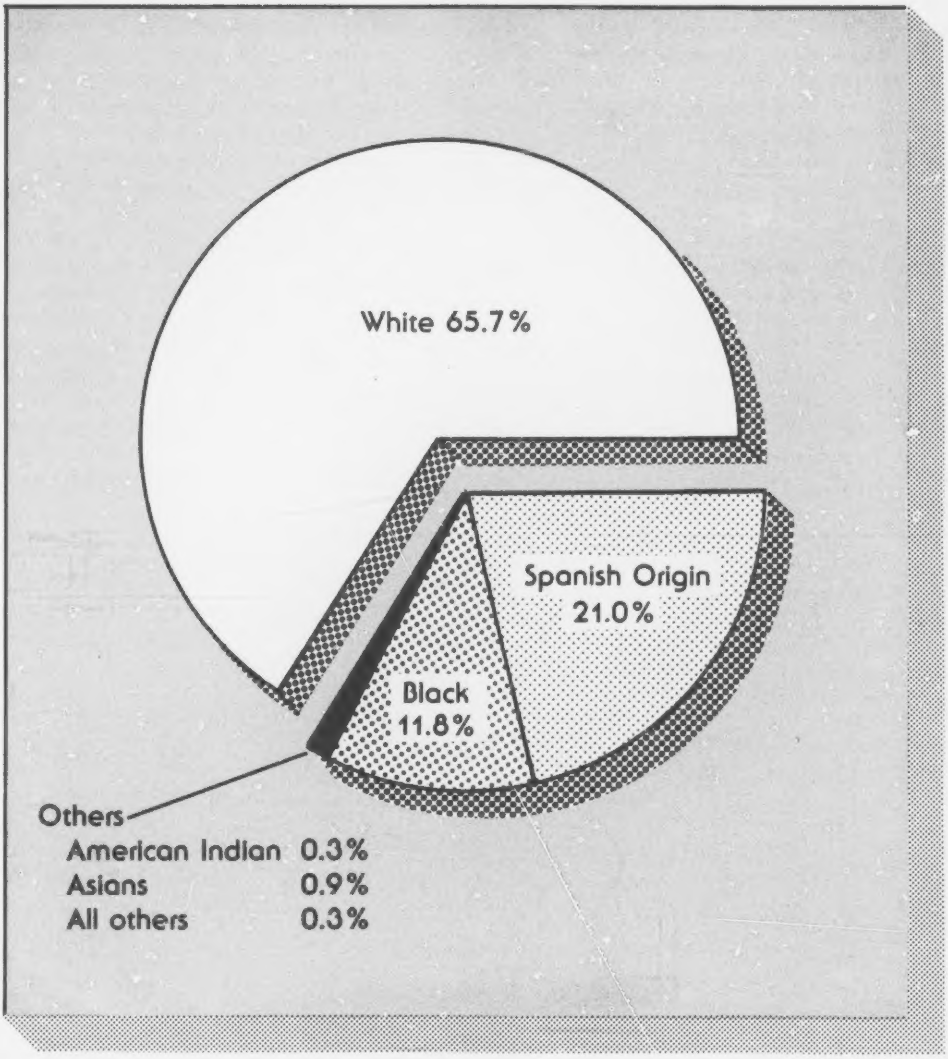
- o Texas's largest minority group is the Spanish-origin population, the second largest among the United States with nearly 3 million. Nearly 21 percent of the population considers itself to be of Spanish origin, which is the second highest percentage in the nation (American Demographics, 1983).

- o Eleven of the fifty metropolitan areas in the country with large Spanish-origin populations are in Texas, ranging from San Antonio with more than 481,000 (ranked fifth) to Lubbock with more than 41,000 (ranked fiftieth). In percentage of Spanish-origin population, nineteen of the top fifty metropolitan areas are in the state. Six of the top seven are Laredo (91.5 percent), McAllen-Edinburg-Mission (81.3 percent), Brownsville-Harlingen (77.1 percent), El Paso (61.9 percent), Corpus Christi (48.5 percent), and San Antonio (44.9 percent). The rest range from Victoria (30.4 percent--ranked eleventh) to Dallas (8.9 percent--ranked fiftieth) (American Demographics, 1983).

- o In comparison with the Spanish-origin population, other minority groups in Texas are smaller: Blacks constitute 11.8 percent of Texas's population, American Indians 0.3 percent, Asians 0.9 percent, all others 0.3 percent. Texas's Black population is the third largest in the U.S. with 1.7 million and is the sixteenth largest in proportion. The Asian population, tied for fourteenth in proportion, is the fifth largest at 120,000 while the American Indian population of approximately 39,000 is the ninth largest in the country (American Demographics, 1983 and U.S. Bureau of the Census, 1981).

- o Three metropolitan areas in Texas are among the top fifty in the size of Black population: Houston with nearly 514,000 (ranked ninth), Dallas with almost 314,000 (sixteenth), and Fort Worth-Arlington with nearly 103,000 (forty-ninth). In percentage of Black population, Longview-Marshall (22.6 percent Black) ranks thirty-third. Tyler (21.9 percent) is thirty-sixth, and Beaumont-Port Arthur (21.8 percent) ranks thirty-seventh (American Demographics, 1983).

## Exhibit 2
## Population by Race and Spanish Origin, 1980
## —Texas—



**Source:** Kaufman et al., 1983, Table 21 and 23

## Exhibit 3

## School and College-Age Population by Race and Spanish Origin, 1980 (Actual) and 2000 (Projected)

## —Texas—

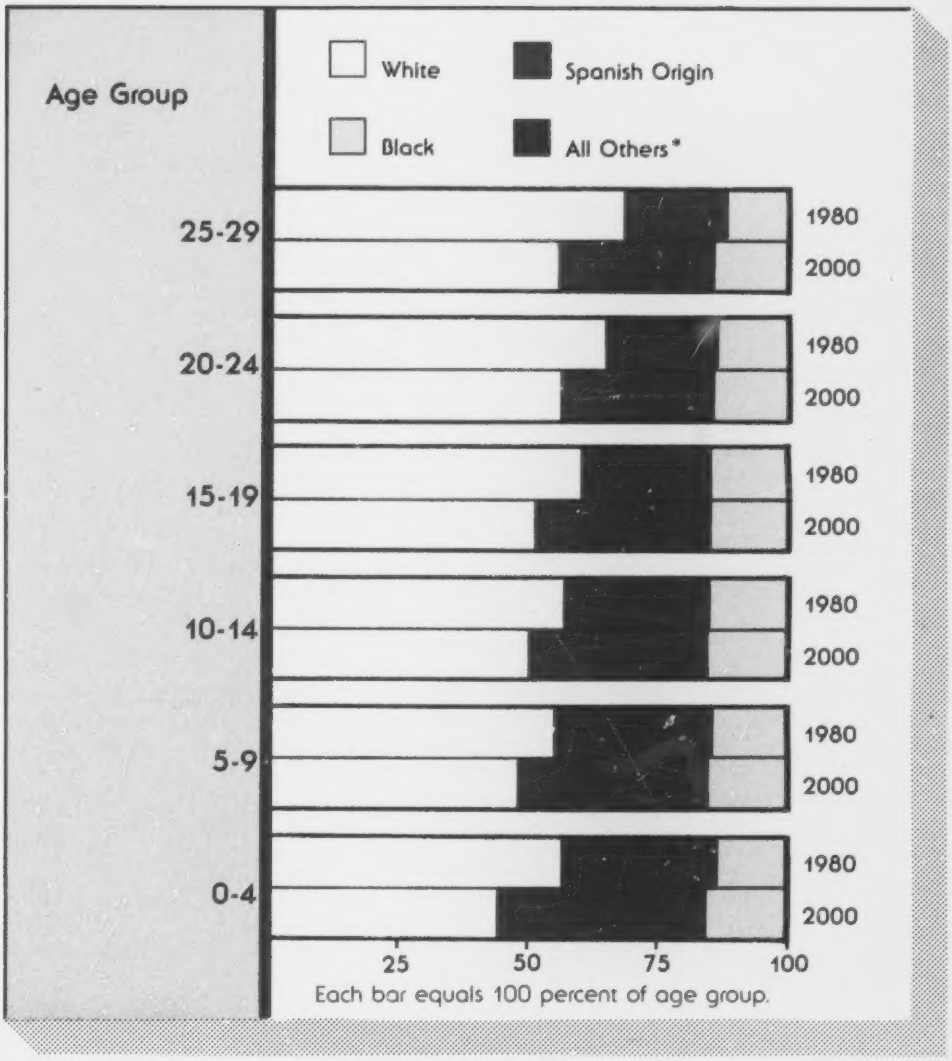
This exhibit shows the distribution of people of school age by race and Spanish origin for 1980 and a projection for the year 2000. The projection is based on a regression analysis of age cohorts from the 1980 census. Because the percentages of American Indians and Asians in Texas are so small, they have been included in the All Others category in Exhibit 3. American Indians constitute between 0.2 to 0.3 percent of the population aged 0-29, and Asians make up between 0.7 to 1.3 percent of that age group. The projections do not show any trends toward substantial increases among these racial groups between 1980 and 2000.

- Exhibit 3 shows that the Spanish-origin population tends to be highly concentrated in the younger age groups. Although people of Spanish origin constituted 21 percent of the total population of Texas in 1980, they accounted for 30, 30, and 28 percent respectively of the three youngest age groups (0-4, 5-9, and 10-14 years).

- By the year 2000, children of Spanish origin are projected to account for 39, 37, and 35 percent respectively of the three youngest age groups.

- The numbers of Black, Asian, and American Indian children will not be as large as the Spanish-origin group, but by the year 2000, it is estimated that more than 15 percent of the children below age 15 in Texas will be Black.

## Exhibit 3
## School and College-Age Population by Race and Spanish Origin, 1980 (Actual) and 2000 (Projected)
## —Texas—



**Source:** Kaufman et al., 1983, Tables 20 and 22

***Note:** The All Others group includes the American Indian and Asian populations. Asians constitute between 0.7 and 1.3 percent of the state population of the various age groups, American Indians between 0.2 and 0.3 percent, and others between 0.2 to 0.5 percent. There are no data to suggest that the American Indian and Asian proportions of the various age groups will be increasing between 1980 and 2000.

# Exhibit 4

# Educational Attainment by Race and Spanish Origin of Persons Aged 25 and Over, 1980

# —Texas—

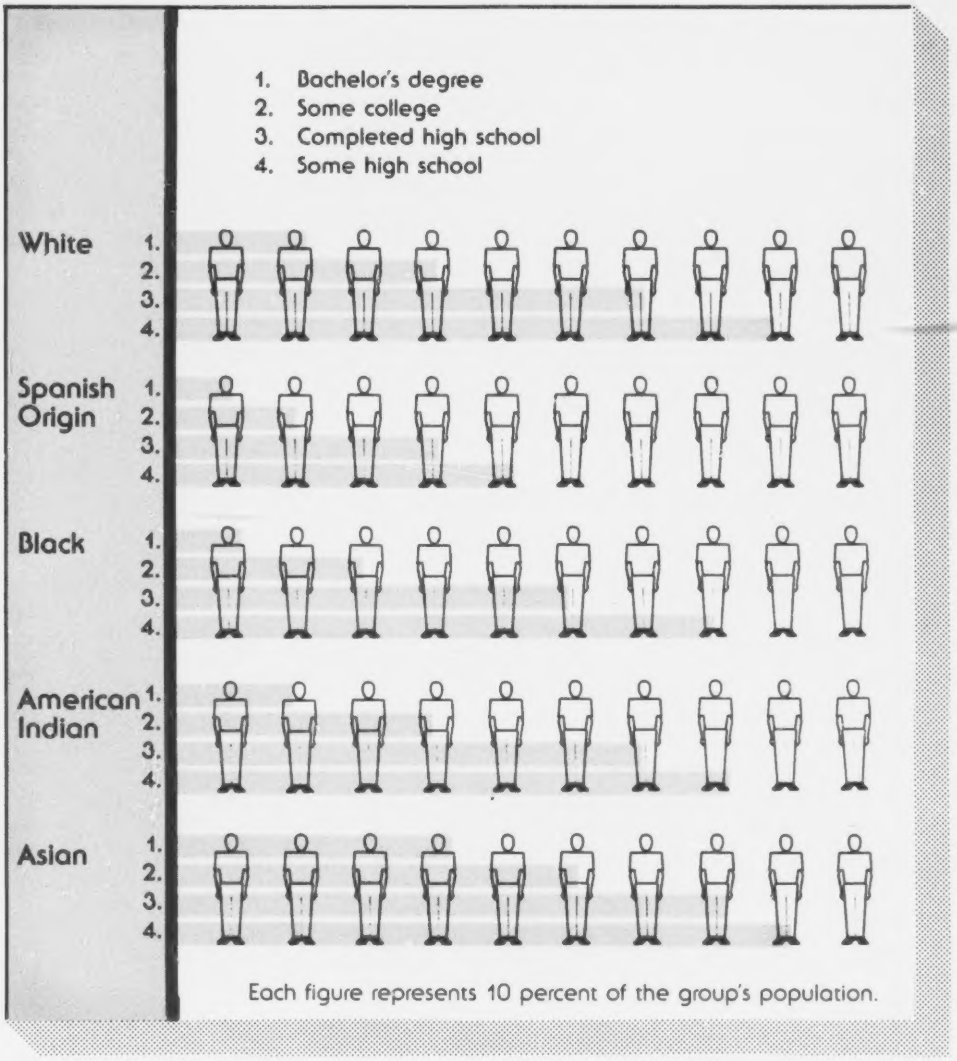
Exhibit 4 shows the proportions of the population aged 25 and over that have completed various levels of education. As the levels of educational attainment rise, the proportions of the population reaching those levels decrease. The differences in attainment among racial and ethnic groups are striking. It must be emphasized that school attainment of Texas adults in 1980 does not necessarily reflect what is taking place among the present generation of students in school, but the educational attainment of parents has been shown to affect the educational choices of their children. Exhibit 5, by presenting information on recent enrollment figures for high school youth, may indicate that minorities' educational attainment is increasing.

- In 1980, Texas had the twenty-third highest proportion in the nation (16 percent) of college graduates in its population aged 25 or older and the thirtieth highest percentage of high school graduates (61.3 percent) (American Demographics, 1982).
- Only about one-third of the Spanish-origin population aged 25 and over had completed high school in 1980, compared with approximately two-thirds of the Whites and American Indians, three-quarters of the Asians, and one-half of the Blacks in the same age group.
- Approximately 36 percent of the White, 24 percent of the Black, 32 percent of the American Indian, and 55 percent of the Asian population had completed some college, compared with 15 percent of the Spanish-origin population.
- The disparity in educational attainment is most striking at the bachelor's degree level or higher. In 1980, 18 percent of the White population and 39 percent of the Asian population had completed at least a bachelor's degree, compared with 9 percent of the Blacks, 12 percent of the American Indians, and 6 percent of the Spanish-origin population.

## Exhibit 4

## Educational Attainment by Race and Spanish Origin of Persons Aged 25 and Over, 1980

## —Texas—



**Source:** Kaufman et al., 1983, Table TX-4

# Exhibit 5

# Persistence in High School of Ninth Graders, Fall 1979 to Fall 1982 (Public Schools Only)

## —Texas—

Exhibit 5 presents the percentage of fall 1979 ninth graders in Texas public schools who were enrolled as tenth graders in fall 1980, eleventh graders in fall 1981, twelfth graders in fall 1982, and graduated in spring 1983. While these figures are not identical to rates of persistence for the various racial and ethnic groups through graduation, they may serve as an indicator or a relative measure of persistence. The numbers of American Indian and Asian students in Texas are too small to imply persistence from the data. In-migration has caused the absolute numbers of Black students in the twelfth grade groups to increase.

- This exhibit implies that Hispanics have higher dropout rates than Whites or Blacks and that these students appear to drop out earlier. While White and Black eleventh graders equalled approximately 85 and 80 percent respectively of White and Black ninth grade enrollments two years earlier, Hispanic eleventh graders totalled 67.5 percent of their cohort.

- The number of Hispanic high school seniors in 1982 represented 66.4 percent of the number of ninth graders three years earlier as opposed to 86 percent for Blacks and 81 percent for Whites.

- The numbers of high school graduates in spring 1983 compared with the numbers of ninth graders in fall 1979 show greater disparities. The size of the White high school graduating class was 74.5 percent as large as the 1979 White ninth grade group. Similar figures for the Hispanic and Black groups are 59.7 and 63.2 percent respectively.

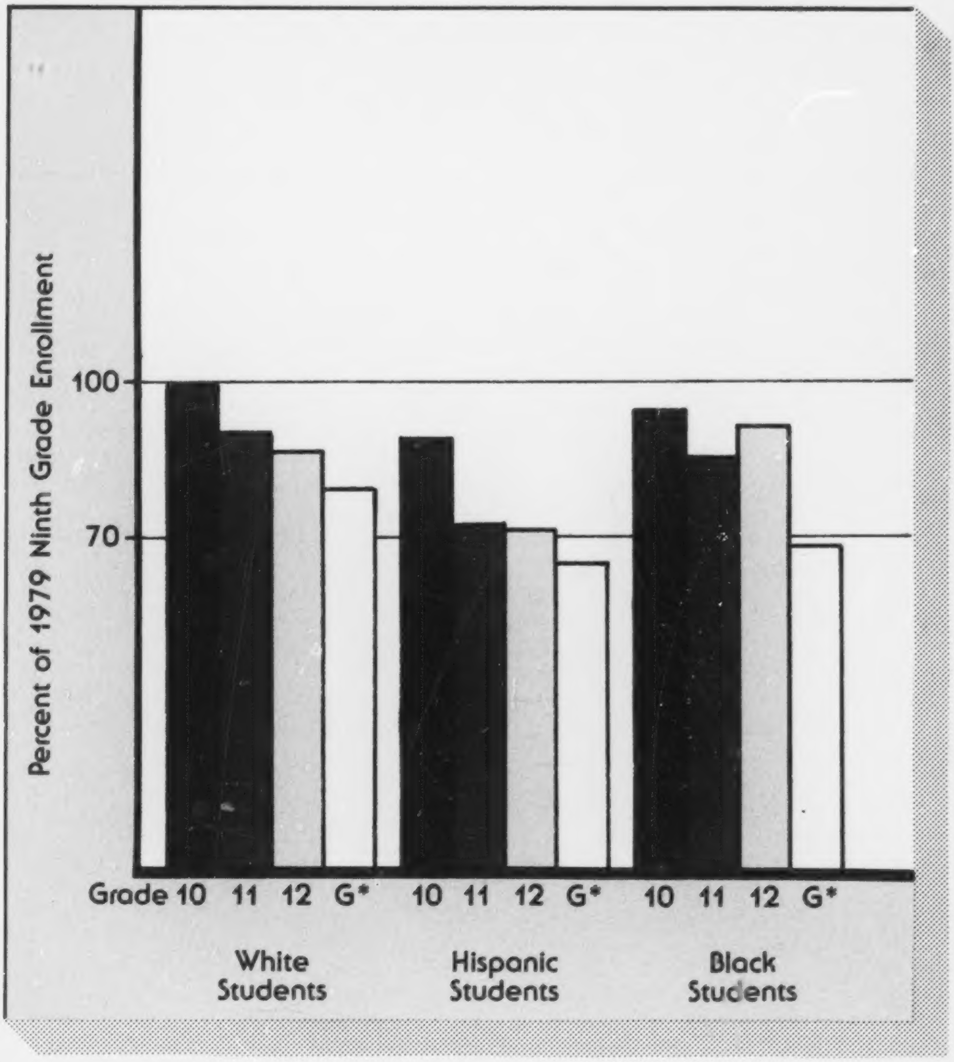
- Thus, it is clear that a sizeable part of Black and Hispanic youth, relative to others, will not complete high school and be eligible to enter college.

- Although these figures, which show the "leakage" of minorities from the "educational pipeline," are different from nationwide figures the trends are similar. Nationally, 83 percent of White students over the period from 1973 to 1979 completed high school compared with 72 percent of Black students and 55 percent of Hispanics (Astin, 1982).

## Exhibit 5

## Persistence in High School of Ninth Graders, Fall 1979 to Fall 1982 (Public Schools Only)

## —Texas—



**Source:** Western Interstate Commission for Higher Education, 1984

*Graduates

# Exhibit 6

# Percentage of 1980 U.S. High School Seniors Subsequently Enrolled in College

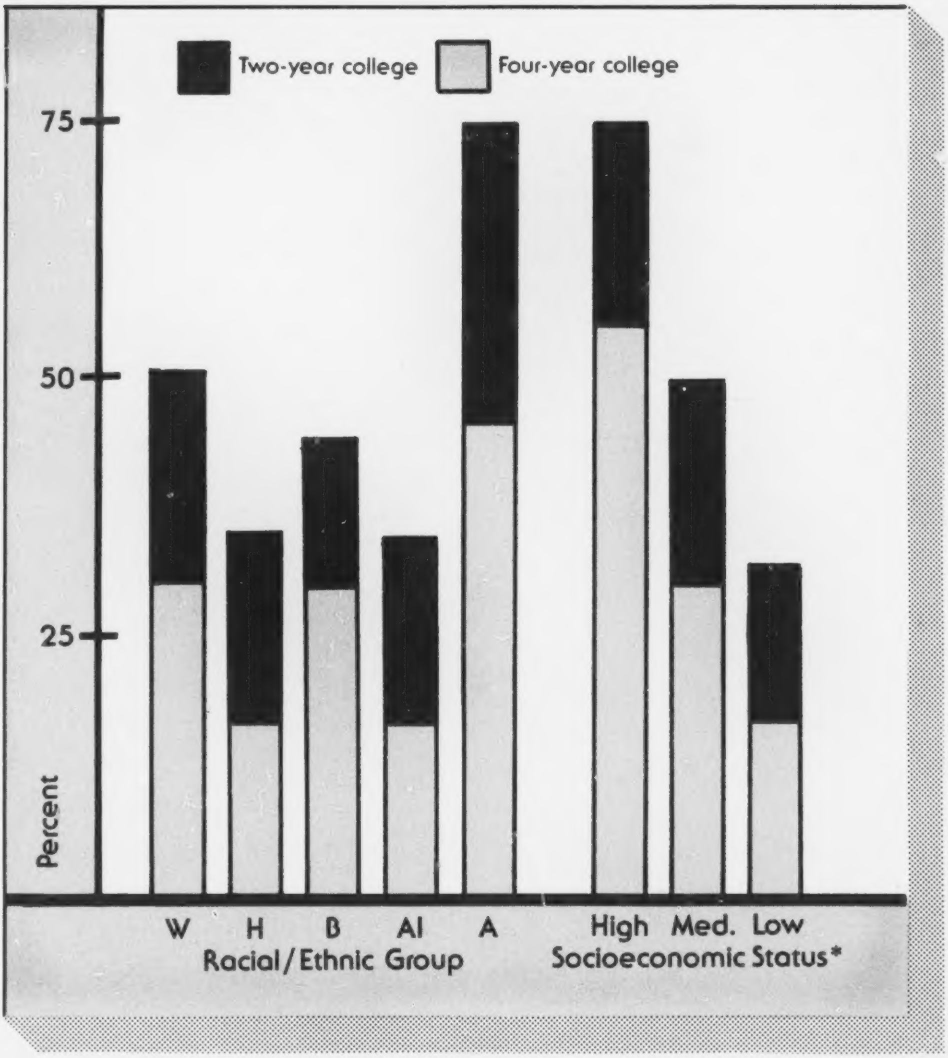
Taken together, Exhibits 6 and 7 illustrate the relationships among race and/or ethnicity, family income, and college attendance. Exhibit 6 displays the results of a national survey relating to the percentage of 1980 high school graduates who enrolled in college during the next several years. Data were not available on a state-by-state basis. It should be recognized that this was a national survey with limited generalization to the population of specific states. The survey did show that attendance patterns in the West were different from other regions. Although approximately the same percentage of western high school seniors attended college as seniors from other regions of the U.S., a greater percentage of students from the West attended two-year colleges than students from the other regions (28 percent in the West compared with 14 percent in the Northeast and 16 percent in the North Central states and the South).

- The five bars on the left of the exhibit show the college attendance patterns for the racial and Spanish-origin groups. White and Black students attended four-year institutions in approximately the same proportions, but a greater proportion of Whites than Blacks attended two-year institutions, which accounts for the greater overall college-going rate for Whites. Compared with the other groups, American Indian and Spanish-origin students attended two-year colleges in relatively large proportions and four-year colleges in low proportions. Attendance at both two-year and four-year institutions by students of Asian ancestry was far greater than for any other group.

- Attendance patterns vary according to socioeconomic status (SES), which is measured by a composite of parental education, family income, father's occupation, and household characteristics. High SES students are more likely to attend postsecondary educational institutions at all levels than those with lower SES.

## Exhibit 6

## Percentage of 1980 U.S. High School Seniors Subsequently Enrolled in College



**Source:** National Center for Education Statistics, 1984

*Socioeconomic status is measured by a composite of parental education, family income, father's occupation, and household characteristics.

# Exhibit 7

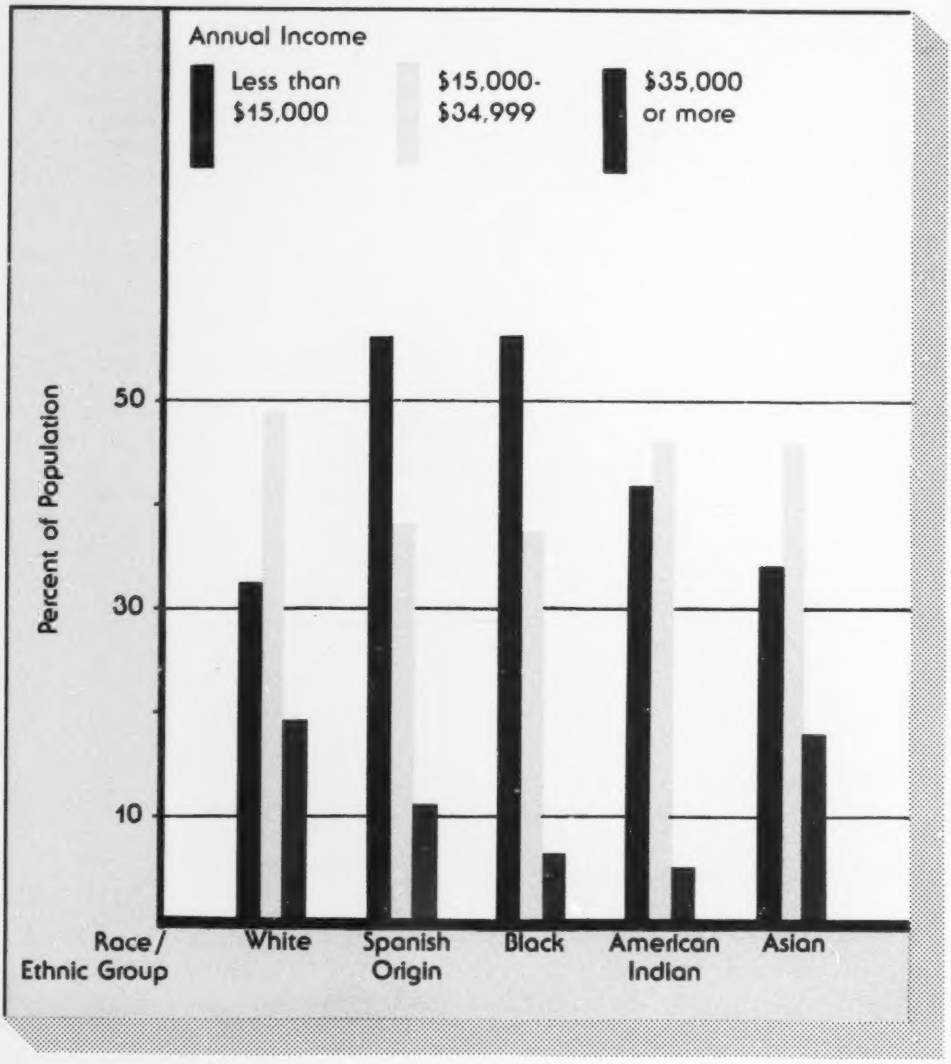
# Family Income by Race and Spanish Origin, 1979
## —Texas—

Exhibit 7 shows the percentages of the population with family incomes in three ranges: less than $15,000 per year; $15,000 to $34,999 per year; and $35,000 or more per year. The distribution for each racial or ethnic group is illustrated.

- Large proportions of the Black and Spanish-origin populations come from families earning less than $15,000 per year, and small proportions of those groups come from families earning $35,000 or more.
- Family income levels for the White and Asian populations are similar: compared with the other racial or ethnic groups, relatively low percentages earn less than $15,000 and higher percentages earn more than $35,000. Although income levels for American Indian families are somewhat lower than for Whites and Asians, the pattern is similar.
- This exhibit illustrates the relatively low economic status of Blacks and people of Spanish origin in Texas, compared with Whites, American Indians, and Asians.
- These figures, when combined with the general information on student attendance patterns presented in Exhibit 6, demonstrate the important connection between economic status and education.

Exhibit 7

# Family Income by Race and Spanish Origin, 1979
—Texas—



Source: Kaufman et al., 1983, Table TX-6

# Exhibits 8A-8E
# Postsecondary Enrollment Compared with Representation in the Population, 1980
## —Texas—

Exhibits 8A-8E display the composition of postsecondary enrollments by race and ethnicity compared with each group's representation in the college-age population (aged 20-29). Each exhibit uses bars to portray the proportion of one racial or ethnic group enrolled in each of the four levels of postsecondary education. The bars are superimposed upon a background field representing that group's proportion of the college-age population. Thus, the reader can determine whether a group is well represented among postsecondary students in proportion to its representation in the population.

- The White proportion of enrollments at all levels of postsecondary education is greater than the White proportion of the college-age population in general. The White proportion of two-year college enrollment is substantially greater than the White share of the college-age population, and White representation increases at the four-year, graduate, and first professional levels.

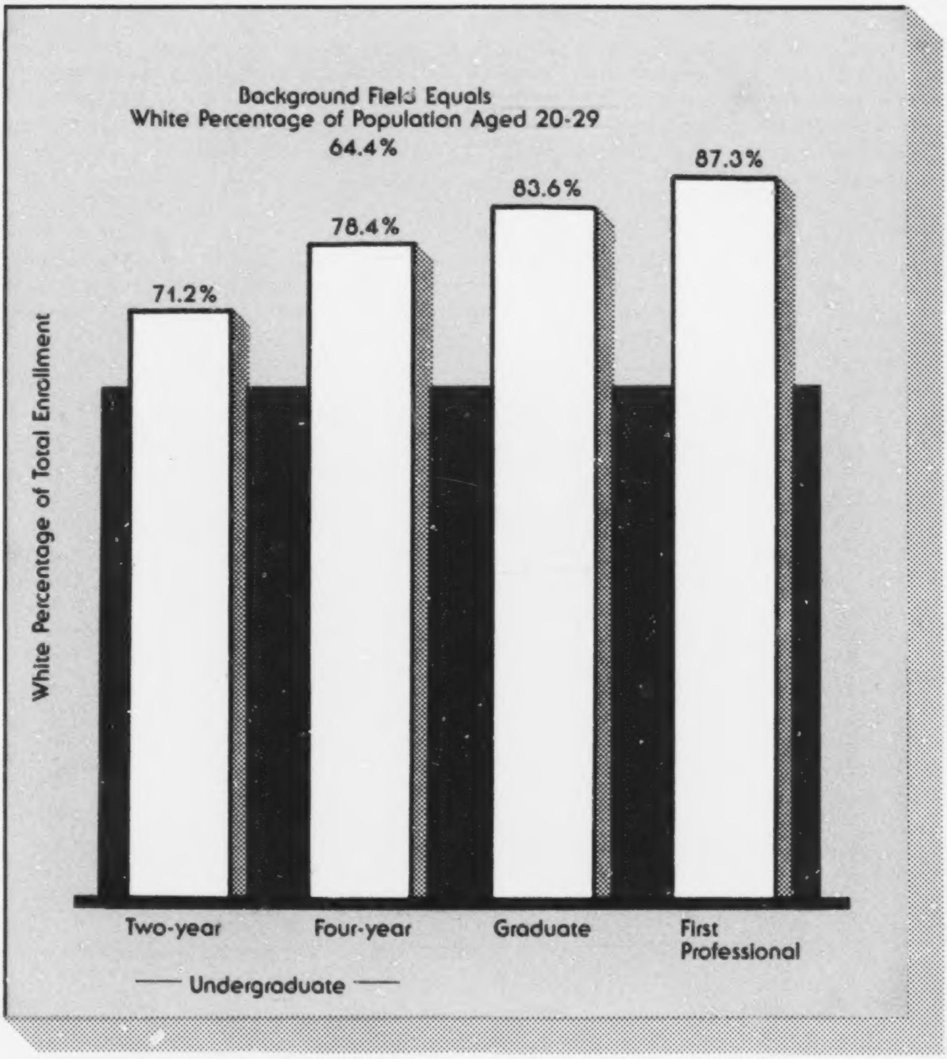
- Hispanics and Blacks are underrepresented at all levels of postsecondary education, especially at the graduate level, where the proportions of Hispanic and Black enrollments are less than one-half as large as the Spanish-origin and Black proportions of the college-age population in Texas.

- American Indians and Asians are well represented at all levels of higher education. Asian students are slightly underrepresented at the four-year undergraduate level, but at all other levels the proportions of American Indians and Asians enrolled equal or exceed the American Indian and Asian proportions of the college-age population in Texas.

## Exhibit 8A

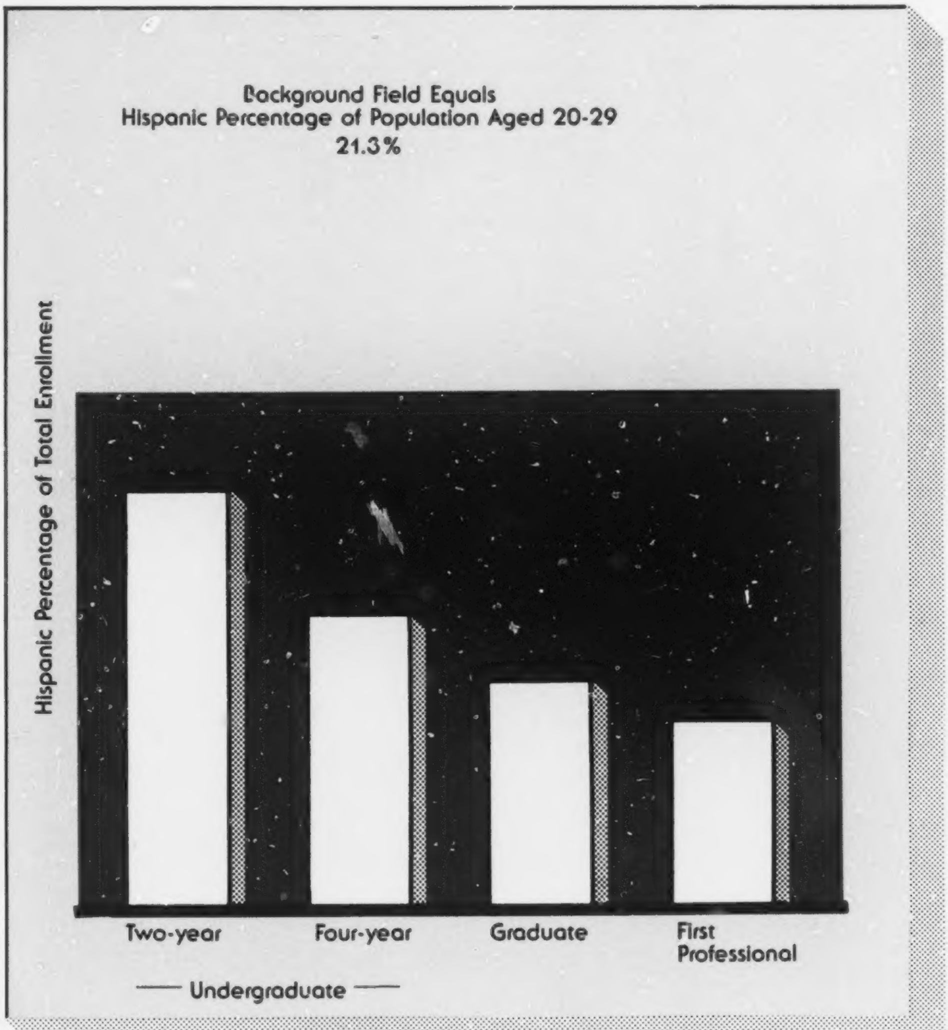
## White Postsecondary Enrollments Compared with Representation in the Population, 1980

## —Texas—



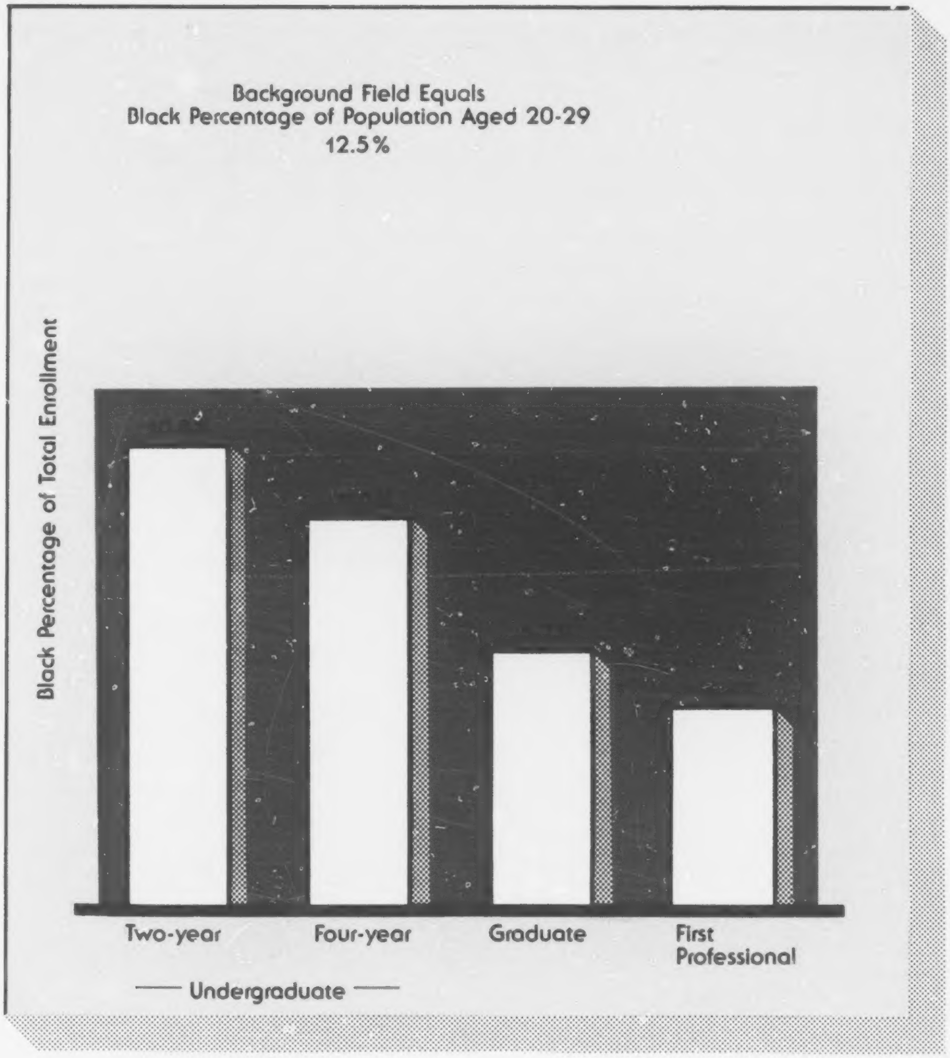
Source: Kaufman et al., 1983, Tables 7 and 22

## Exhibit 8B
## Hispanic Postsecondary Enrollments Compared with Representation in the Population, 1980
## —Texas—



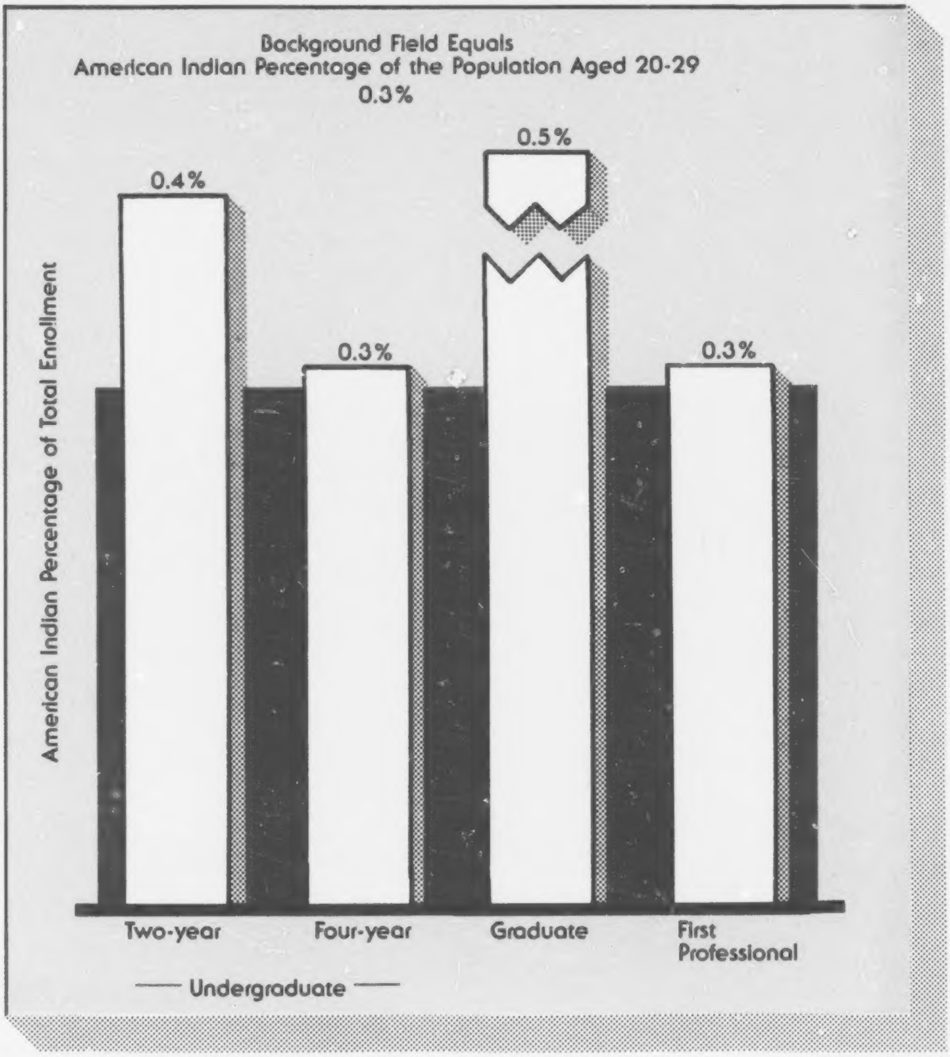
Source: Kaufman et al., 1983, Tables 7 and 22

## Exhibit 8C
## Black Postsecondary Enrollments Compared with Representation in the Population, 1980
## —Texas—



**Source:** Kaufman et al., 1983, Tables 7 and 22

## Exhibit 8D
## American Indian Postsecondary Enrollments Compared with Representation in the Population, 1980
## —Texas—

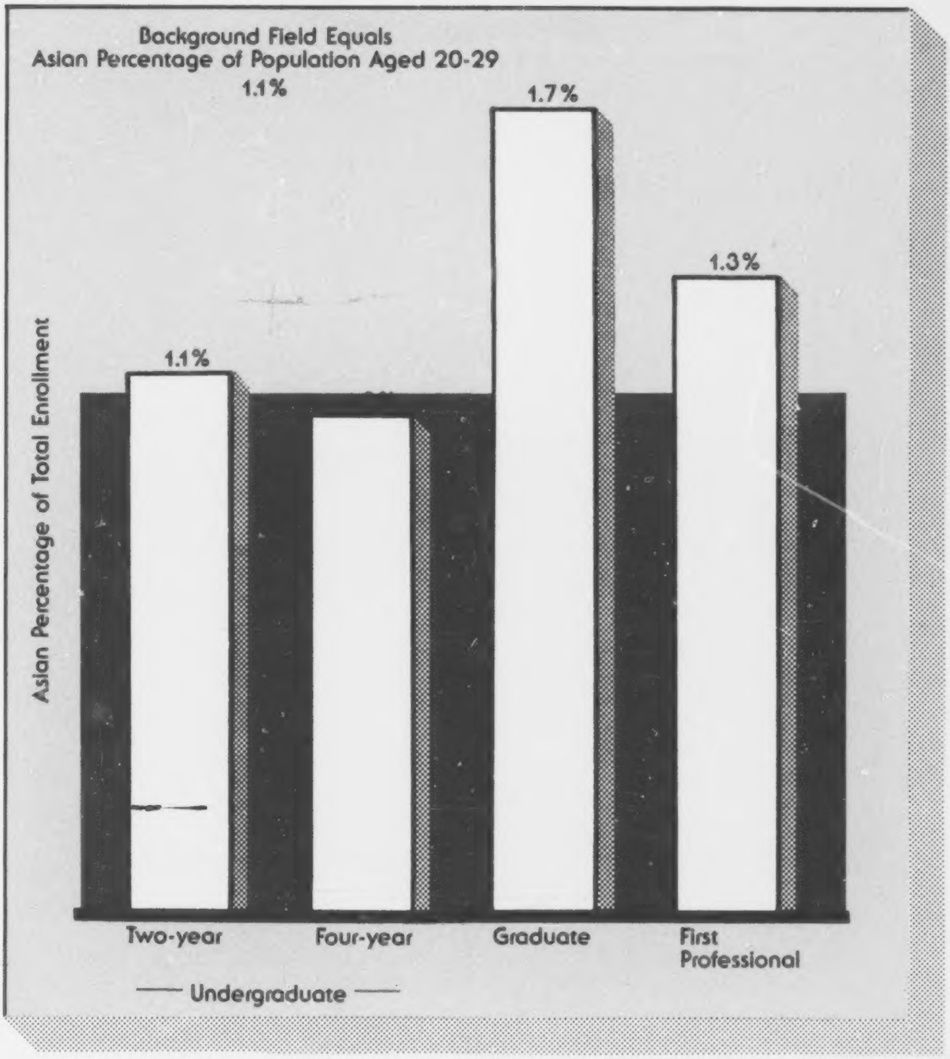


Source: Kaufman et al., 1983, Tables 7 and 22

## Exhibit 8E

## Asian Postsecondary Enrollments Compared with Representation in the Population, 1980

## —Texas—



Source: Kaufman et al., 1983, Tables 7 and 20

# Exhibits 9A-9E
# Degrees Earned in Texas
# Compared with Representation in the Population, 1980-81
## —Texas—

Exhibits 9A-9E display the distribution among racial and ethnic groups of earned degrees at five levels (associate, bachelor's, master's, doctoral, and first professional) with each group's representation in the college-age population (aged 20-29). Each exhibit uses bars to portray the proportion of earned degrees by one racial or ethnic group in each of the five levels of postsecondary education. The bars are superimposed upon a background field representing that group's proportion of the college-age population. Thus, the reader can determine whether a group is well represented in earned degrees in proportion to its representation in the population.

o In general, when the proportions of degrees awarded to members of minority groups are compared with the proportions of the college-age population, the overall pattern of underrepresentation of minorities is similar to that in enrollments, especially at the baccalaureate and higher levels.

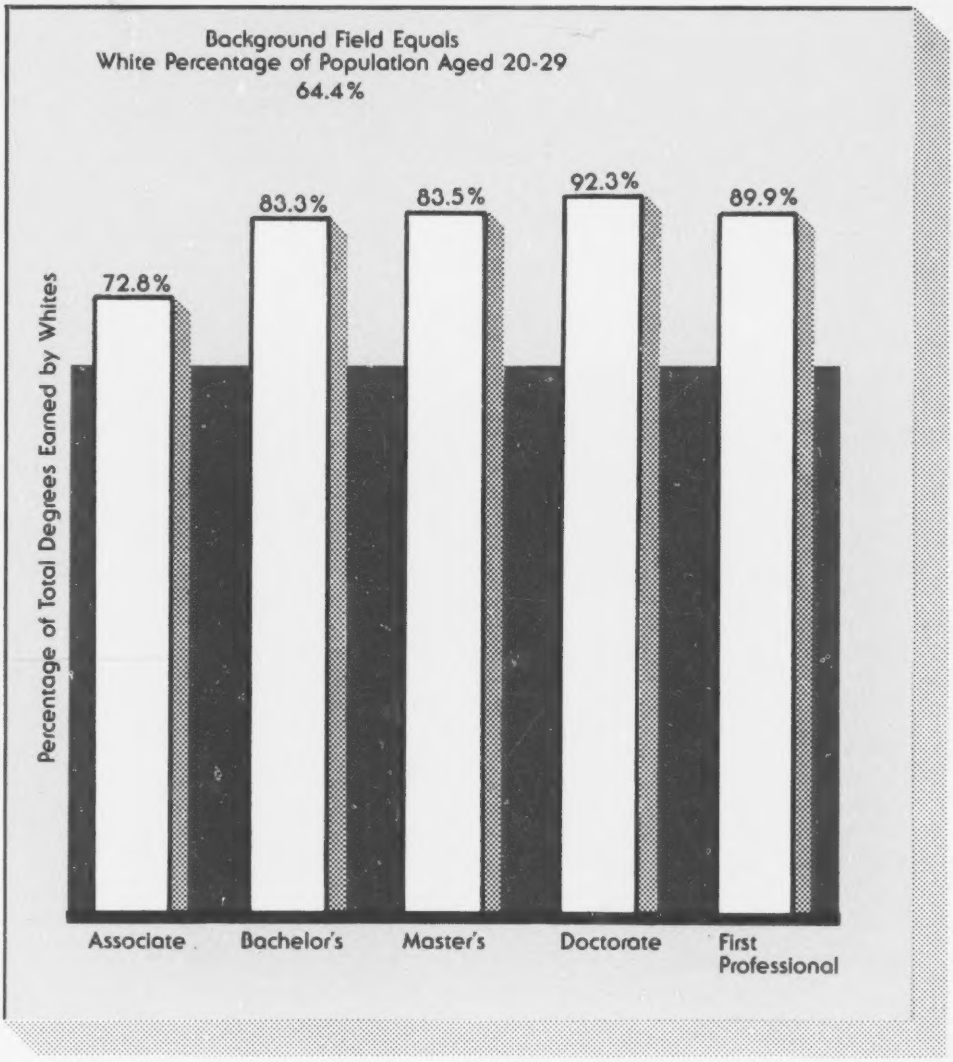
o The White proportion of those earning degrees at all levels of postsecondary education is substantially greater than the White proportion of the college-age population in general.

o Hispanics are underrepresented in earned degrees at all levels of postsecondary education. At the two-year degree level, the proportion of degrees earned by Hispanic students is slightly less than three-quarters the size of the Spanish-origin proportion of the college-age population in the state. The proportions of degrees earned by Hispanic students are less than one-half as large as the Spanish-origin proportion of the college-age population at the bachelor's level, one-third as large at the master's level, less than one-sixth at the doctoral level, and one-quarter at the first professional level.

o Blacks are also underrepresented at all levels of postsecondary education in Texas but to a slightly lesser extent. At the two-year level, the Black proportion is approximately five-sixths the size of the Black proportion of the college-age population, one-half the size at the bachelor's and master's levels, and one-quarter the size at the doctoral and first professional levels.

o American Indians and Asians are well represented at all degree levels, although there is slight underrepresentation of American Indians at the doctoral level and of Asians at the first professional level. At the associate, bachelor's, and master's levels, the American Indian proportions of degrees earned are substantially larger than the American Indian proportion of the college-age population in the state. The same is true for Asians at the master's and doctoral levels.

## Exhibit 9A
## Degrees Earned by Whites Compared with Representation in the Population, 1980
## —Texas—

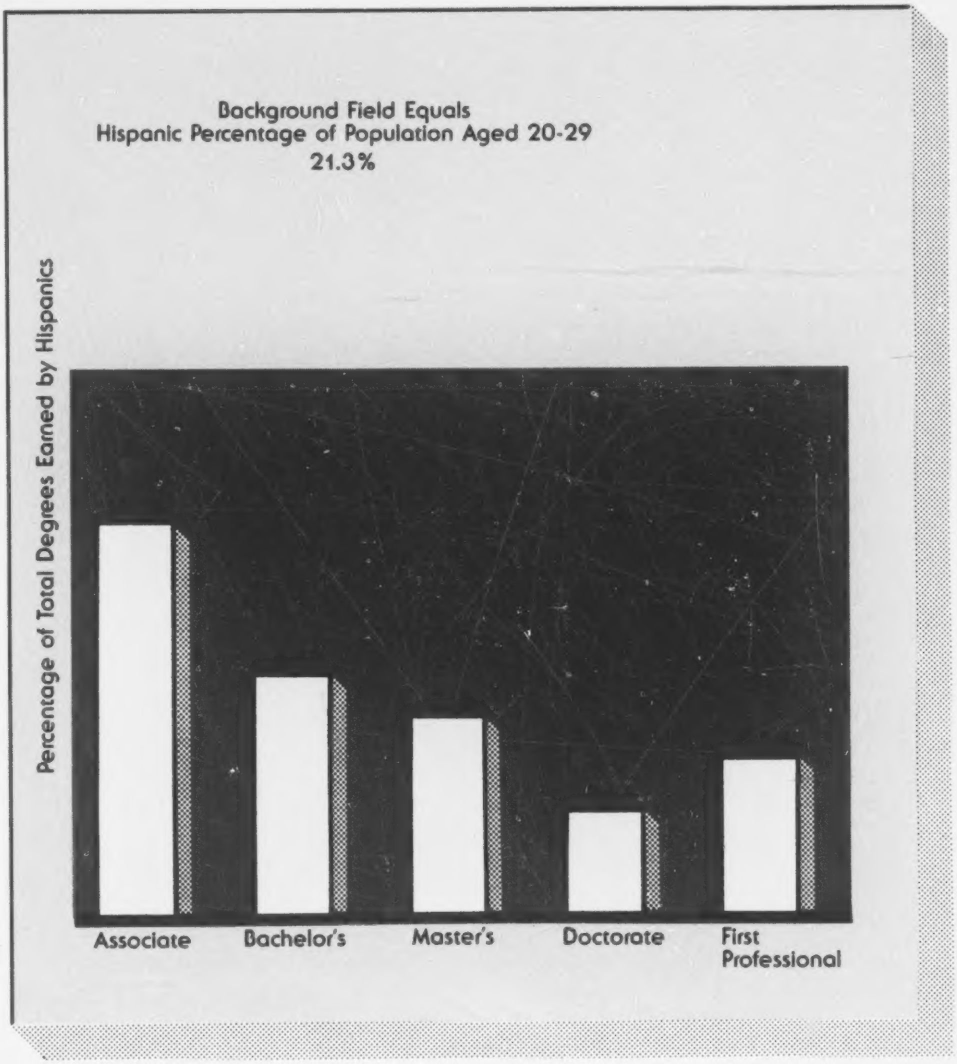


Source: Kaufman et al., 1983, Tables 12 and 22

## Exhibit 9B

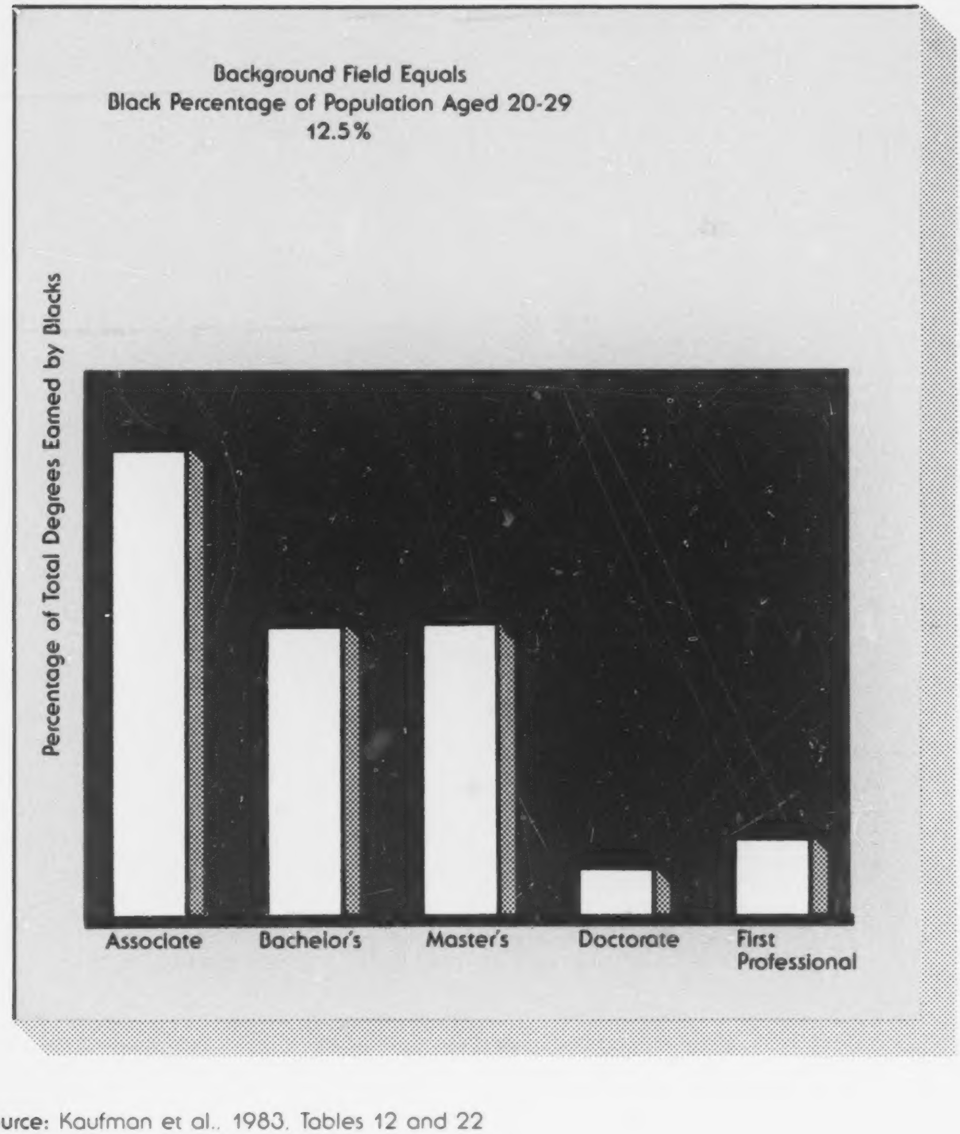
## Degrees Earned by Hispanics Compared with Representation in the Population, 1980

## —Texas—



**Source:** Kaufman et al., 1983, Tables 12 and 22

# Exhibit 9C
# Degrees Earned by Blacks Compared with Representation in the Population, 1980
## —Texas—

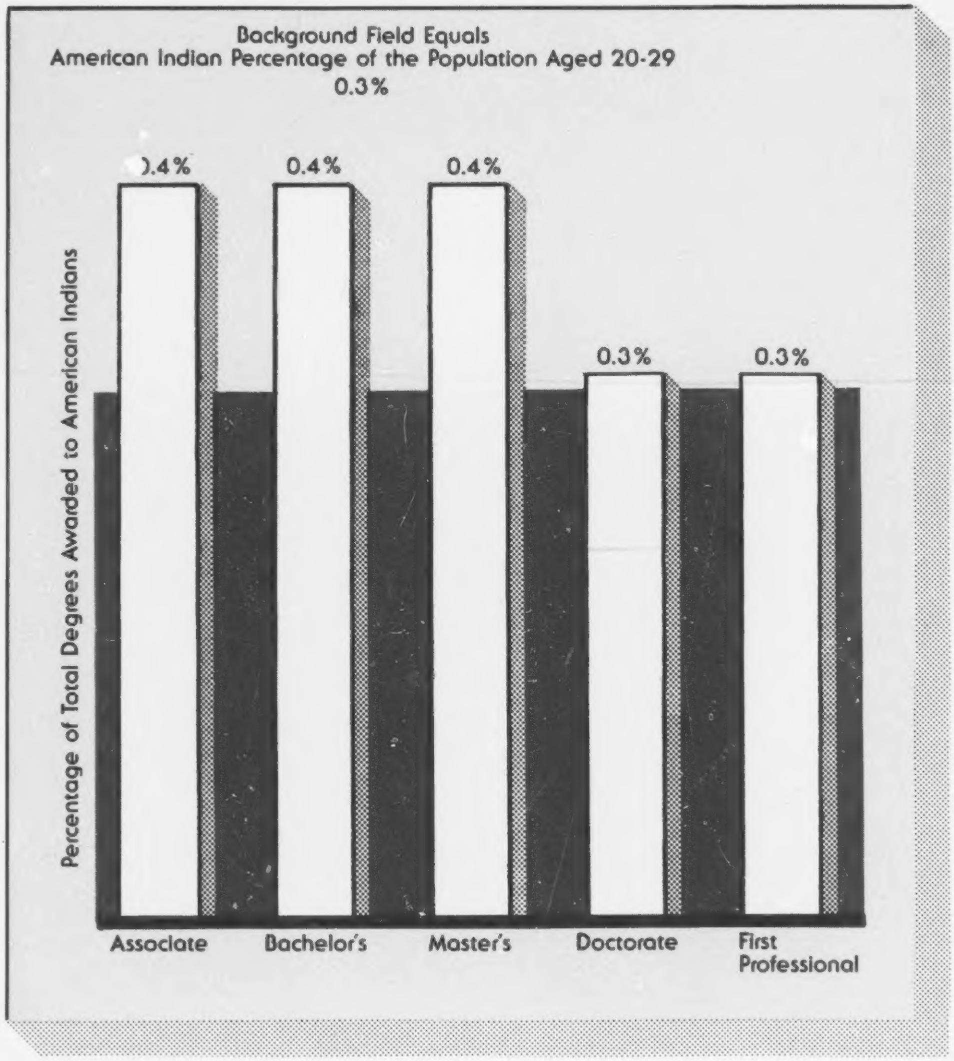


**Source:** Kaufman et al., 1983, Tables 12 and 22

## Exhibit 9D

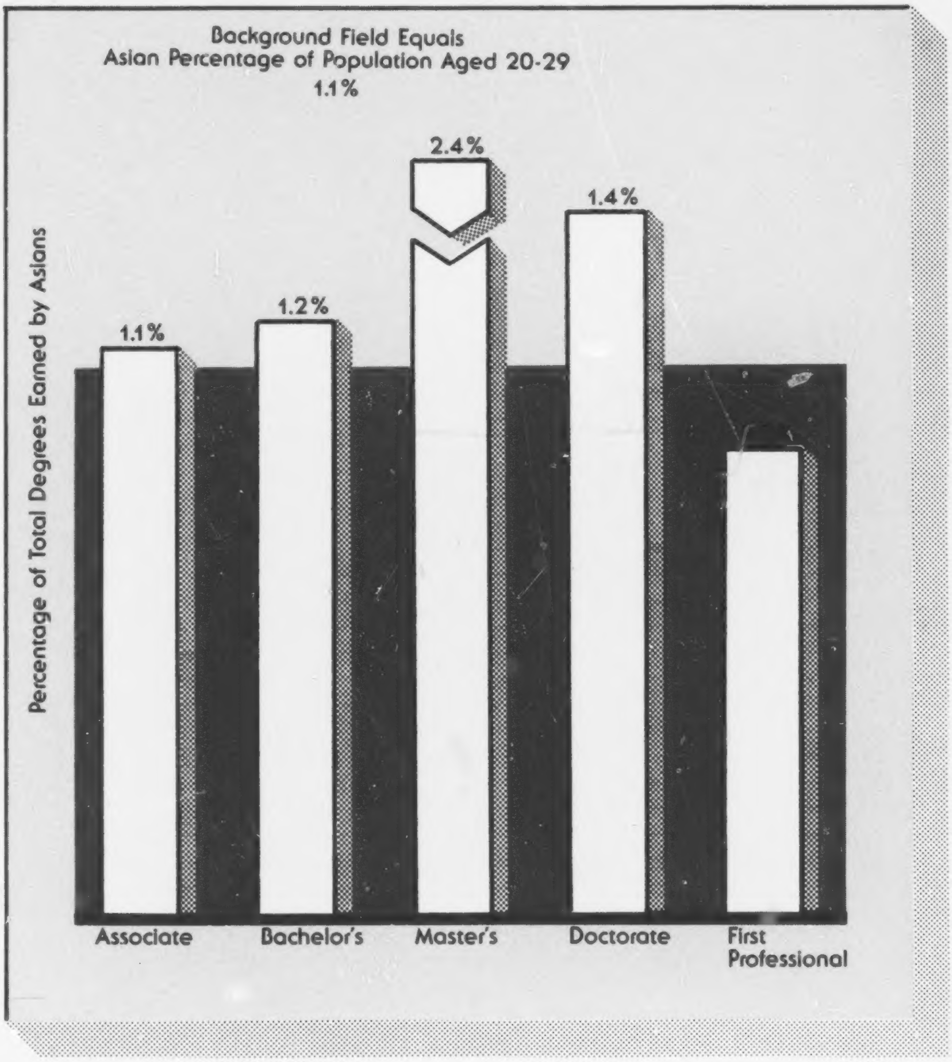
## Degrees Earned by American Indians Compared with Representation in the Population, 1980

## —Texas—



Source: Kaufman et al., 1983, Tables 12 and 22

## Exhibit 9E
## Degrees Earned by Asians Compared with Representation in the Population, 1980
## —Texas—



Source: Kaufman et al., 1983, Tables 12 and 20

## Exhibit 10

# Earned Degrees by Race and Spanish Origin, 1976-77 to 1980-81

## —Texas—

This table presents the number of degrees awarded at five levels (associate, bachelor's, master's, doctoral, and first professional) by racial or ethnic group. At the doctoral and first professional levels, interpretation is difficult because such small numbers of degrees are awarded to minority students that year-to-year fluctuations appear as substantial percentage changes.

- The number of associate degrees awarded in Texas declined more than 27 percent between 1976-77 and 1980-81, and the number of doctorates and first professional degrees increased approximately 10 percent over the same period.
- At the bachelor's and first professional degree levels, the increase in degrees earned by Hispanic students was greater than the general increase at those levels in Texas from 1976-77 to 1980-81. Conversely there were greater decreases in associate and master's degrees awarded to Hispanics than the overall decreases in the state. At the doctoral level, Hispanics experienced a decrease in degrees earned in contrast to a slight overall increase.
- Black students earned more bachelor's and first professional degrees in 1980-81 than in 1976-77 but markedly fewer associate, master's, and doctoral degrees.
- The number of American Indian students earning degrees at all levels in Texas is small, but they earned substantially more degrees in 1980-81 than in 1976-77 at all levels except the bachelor's and doctoral.
- In 1980-81 Asian students earned substantially more degrees at all levels than they did in 1976-77.
- In most cases there was an increase in degrees earned in 1978-79 from 1976-77 and decreases from 1978-79 to 1980-81.

# Exhibit 10
## Earned Degrees by Race and Spanish Origin, 1976-77 to 1980-81
## —Texas—

| | Degrees Awarded 1976-77 | Degrees Awarded 1978-79 | Percent Change 1976-78 | Degrees Awarded 1980-81 | Percent Change 1978-80 | Percent Change 1976-80 |
|---|---|---|---|---|---|---|
| **State Totals** | | | | | | |
| Associate | 24,387 | 24,184 | -0.8 | 17,626 | -27.1 | -27.7 |
| Bachelor's | 51,699 | 53,656 | 3.8 | 53,589 | -0.1 | 3.7 |
| Master's | 16,467 | 16,236 | -1.4 | 16,135 | -0.6 | -2.0 |
| Doctorate | 1,549 | 1,612 | 4.1 | 1,693 | 5.0 | 9.3 |
| First Professional | 3,452 | 3,596 | 4.2 | 3,818 | 6.2 | 10.6 |
| **White Students** | | | | | | |
| Associate | 17,334 | 16,921 | -2.4 | 12,609 | -25.5 | -27.3 |
| Bachelor's | 42,663 | 43,553 | 2.1 | 42,863 | -1.6 | 0.5 |
| Master's | 12,876 | 12,456 | -3.3 | 12,063 | -3.2 | -6.3 |
| Doctorate | 1,242 | 1,317 | 6.0 | 1,350 | 2.5 | 8.7 |
| First Professional | 3,319 | 3,200 | -3.6 | 3,402 | 6.3 | 2.5 |
| **Hispanic Students** | | | | | | |
| Associate | 4,118 | 3,932 | -4.5 | 2,610 | -33.6 | -36.6 |
| Bachelor's | 4,148 | 4,653 | 12.2 | 4,489 | -3.5 | 8.2 |
| Master's | 1,257 | 1,191 | -5.3 | 1,027 | -13.8 | -18.3 |
| Doctorate | 47 | 47 | 0.0 | 46 | -2.1 | -2.1 |
| First Professional | 157 | 208 | 32.5 | 198 | -4.8 | 26.1 |
| **Black Students** | | | | | | |
| Associate | 2,594 | 2,662 | 2.6 | 1,840 | -30.9 | -29.1 |
| Bachelor's | 3,102 | 3,177 | 2.4 | 3,261 | 2.6 | 5.1 |
| Master's | 1,181 | 1,038 | -12.1 | 946 | -8.9 | -19.9 |
| Doctorate | 55 | 29 | -47.3 | 42 | 44.8 | -23.6 |
| First Professional | 118 | 113 | -4.2 | 136 | 20.4 | 15.3 |
| **American Indian Students** | | | | | | |
| Associate | 58 | 173 | 198.3 | 73 | -57.8 | 25.9 |
| Bachelor's | 206 | 256 | 24.3 | 197 | -23.0 | -4.4 |
| Master's | 52 | 55 | 5.8 | 63 | 14.5 | 21.2 |
| Doctorate | 6 | 8 | 33.3 | 4 | -50.0 | -33.3 |
| First Professional | 6 | 14 | 133.3 | 12 | -14.3 | 100.0 |
| **Asian Students** | | | | | | |
| Associate | 85 | 137 | 61.2 | 199 | 45.3 | 134.1 |
| Bachelor's | 321 | 470 | 46.4 | 619 | 31.7 | 92.8 |
| Master's | 126 | 258 | 104.8 | 348 | 34.9 | 176.2 |
| Doctorate | 19 | 34 | 78.9 | 21 | -38.2 | 10.5 |
| First Professional | 20 | 32 | 60.0 | 35 | 9.4 | 75.0 |

**Source:** Office for Civil Rights, 1979 and 1981.

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Western Interstate Commission for Higher Education. 1984. The data upon which Exhibit 5 is based was provided by the Texas Board of Education in response to a telephone request.

6.5

# Minorities in Higher Education: The Changing Southwest

## New Mexico

A report prepared by the WICHE Information Clearinghouse in cooperation with the Western Regional Office of the College Board and with the support of the Atlantic Richfield Foundation

Geoffrey Dolman, Jr.
Norman S. Kaufman

Western Interstate Commission for Higher Education WICHE

The College Board

# WICHE

WICHE, the Western Interstate Commission for Higher Education, is a nonprofit regional organization. It helps the thirteen member states to work together to provide high-quality, cost-effective programs to meet the education and manpower needs of the West. Member states are Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming. Through its Information Clearinghouse, WICHE provides information to assist higher education and governmental policy makers in the West.

This series of reports includes the following publications:

Minorities in Higher Education: The Changing Southwest (Arizona), publication no. 2A134a

Minorities in Higher Education: The Changing Southwest (California), publication no. 2A134b

Minorities in Higher Education: The Changing Southwest (Colorado), publication no. 2A134c

Minorities in Higher Education: The Changing Southwest (New Mexico), publication no. 2A134d

Minorities in Higher Education: The Changing Southwest (Texas), publication no. 2A134e

Graphics by Scott Knauer

Published May 1985
Western Interstate Commission for Higher Education
P.O. Drawer P
Boulder, Colorado 80302
Telephone: (303) 497-0200
An Affirmative Action/Equal Opportunity Employer
Publication Number 2A134d
Printed in the United States of America
35-100-540-000-401:5C:585:ROB:2A134d

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# Foreword

Sometimes we may become aware of societal trends without recognizing their potential effects on our social institutions. At other times, we may fail to respond adequately to social changes, even though we are aware that they are taking place. Among the virtues of our society are both the tendency toward self-correction--to make adjustments in our social institutions so that they function effectively—and the tendency toward making adjustments that anticipate needed changes and that, in a sense, preempt the need for self-correction.

As data in this and companion reports show, the current levels of education and income achieved by racial and ethnic minorities fall below that of Whites. This imbalance in economic and educational attainment, plus the rapid growth in the population of racial and ethnic minority groups, raises important issues for education and government policy makers in each state. It is the intent of this report to help focus the discussion on these issues and to encourage appropriate responses.

WICHE is grateful to the organizations and individuals who have worked with us on this important project. The College Board cosponsored the study and provided assistance and advice at several stages. The Atlantic Richfield Foundation provided additional financial support. A regional advisory committee, whose members are listed on the following page, provided valuable assistance in preparing these reports and helped develop a strategy for disseminating the results of the study.

May 1985

Phillip Sirotkin
Executive Director
Western Interstate Commission
for Higher Education

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# Introduction

This series of state reports is intended to highlight the implications for educational planning of the changing demography of the Southwest. This project is the outgrowth of an earlier report, which was prepared to provide background data for a regional higher education conference on minority access and retention in higher education (Kaufman et al., 1983).

The decision to concentrate on minorities in higher education in the southwestern states follows from several conclusions that have been well documented.

- Certain racial and ethnic minorities have been underrepresented in higher education relative to nonminorities. This is especially true of Hispanic students, who are well represented, proportionally and numerically, in the population of these states.
- These minorities are even less well represented among college and professional school graduates.
- Increases in the proportion of racial and ethnic minorities among successive age cohorts present a challenge to educators and policy makers concerned with reversing these patterns of underrepresentation.

The reports focus on each of five southwestern states (Arizona, California, Colorado, New Mexico, and Texas) individually in order to call attention to the most important findings in each state.

As college-age populations in these five southwestern states grow in terms of both the numbers and percentages of ethnic minority individuals, policy makers will be faced with a number of serious educational and political questions. For example:

- Are current approaches to provision of educational opportunity--for all seeking it, regardless of ethnic background--sufficient, now and for the future?
- What are the implications for higher education and for institutions' program and resource "mix" of the growing minority share of the college-age population and the simultaneous decline (in some states) of the proportion of Whites in the same age groups?

- o What are the implications of the growth of these minority populations for the economies of the states and their supplies of highly trained manpower, given the current distribution of minority students throughout the educational system (by institutional level and type, for example)?
- o What are the implications for the higher education institutions of the current pattern of distribution of minority students, given the changes in the composition of the college-age group?
- o If the educational patterns of minority students remain unchanged as their numbers grow, what are the possible social and political consequences?

These questions are meant only to suggest the seriousness and complexity of policy issues that need attention. The hope of the organizations publishing the report is that its contents will be useful as these challenging questions are addressed.

## Definitions

The information in these reports comes primarily from two sources: the 1980 census of the population and related surveys by the United States Bureau of the Census provided population and demographic data, and the Higher Education General Information Survey (HEGIS) conducted by the National Center for Education Statistics (NCES) provided education data. Reference to these two sources ensures that there will be comparability in the data presented across states and that other users will have access to the same data sources.

Caution must be used when comparing the two data bases, however, because each source defines racial and ethnic groups differently, with particular impact on the "Hispanic" population group. The HEGIS format designates five racial or ethnic groups: American Indian, Black, Asian, Hispanic, and White. The Census Bureau uses the racial designations American Indian, Black, Asian, Other, and White, plus a further designation "Persons of Spanish Origin" and "Persons not of Spanish Origin," stating that persons of Spanish origin may be of any race. In this report, the Census Bureau data have been reconciled with the HEGIS data format, resulting in the following comparable groups:

| HEGIS | CENSUS |
|---|---|
| American Indian | American Indians, Eskimos, and Aleuts whether of Spanish origin or not |
| Black | Blacks not of Spanish origin |
| Asian | Asian and Pacific Islanders whether of Spanish origin or not |
| Hispanic | Persons of Spanish origin, regardless of race |
| White | White, not of Spanish origin |
| Residual | Total population minus the above (also Other races not of Spanish origin) |

While these breakdowns do not avoid all problems of comparability, they appear to work well for the purposes of this report. To keep the terminology short, in all cases Black and White refer to Black not-Hispanic and White not-Hispanic. Exhibits derived from census data refer to the category "Spanish origin," while exhibits derived from HEGIS data use the term "Hispanic" to identify essentially the same group.

It further must be recognized that the terms "Spanish origin" and "Hispanic" aggregate into one group several ethnic groups, e.g., Central American immigrants, Latinos, Mexican Americans, and others, which may vary from state to state. Each of these groups has its own demographic and cultural characteristics. Policy makers may wish to be aware of these different characteristics and of their implications for higher education.

The most recent and reliable data available were used in this report. In some cases more recent data were available, but older information was used because it was comparable with the data for earlier years whereas the newer data were not. Where the racial and ethnic composition of the college-age population is compared with the composition of the student population and the distribution of degrees among racial and ethnic groups (Exhibits 8A-8E and 9A-9E), HEGIS data from 1980 were used for the education information in order to compare them with census data from the same year.

## Summary

- New Mexico's population is projected to be between 1.7 million and 2.1 million by the year 2000, up from 1.3 million in 1980, a twenty-year growth rate of between 30 and 54 percent. (See Exhibit 1.)

- More than one-half of the population growth from 1970 to 1980 can be accounted for by in-migration, which is projected to remain high. (See narrative for Exhibit 1.)

- People of Spanish origin accounted for 36.6 percent of the total population of New Mexico in 1980, but they accounted for nearly 45 percent of the 0-4 age group. (See Exhibits 2 and 3.)

- By 2000, more than one-half of the age 0-4 population is projected to be of Spanish origin. (See Exhibit 3.)

- Blacks represented 1.7 percent of the total population in 1980, American Indians 8.1 percent, Asians 0.5 percent, and all others 0.5 percent. However, the state's American Indian population of nearly 105,000 is the fourth largest in the United States and the second highest proportion in the nation. The American Indian population generally shows growth patterns similar to that of the Spanish-origin population. (See Exhibits 2 and 3.)

- New Mexico has the fifteenth highest proportion of people aged 25 and older with college degrees. Whites far exceed minority groups in postsecondary educational attainment. (See Exhibit 4.)

- Hispanics tend to have slightly higher high school dropout rates than Blacks or Whites. Dropout rates for American Indians and Others are much higher than those for the other three groups. For example, approximately 74, 67, and 70 percent respectively of the White, Hispanic, and Black ninth graders in 1979-80 remained through the twelfth grade in 1982-83, compared with approximately 45 and 61 percent for American Indians and Others. (See Exhibit 5.)

- Nationwide figures show that 83 percent of Whites (adults and school-age respondents to census surveys during the period from 1974 to 1978) completed high school compared with 72 percent of Blacks and 55 percent of American Indians and Hispanics. (See narrative for Exhibit 5.)

- National data indicate that smaller percentages of students from low-income families enroll in postsecondary education than students from medium-and high-income families. In New Mexico, relatively high percentages of Spanish-origin, Black, and American Indian families earned less than $15,000 in 1979. (See Exhibits 6 and 7.)

- Present enrollment and earned degree patterns show serious underrepresentation (relative to their proportions in the college-age population—aged 20-29) for the largest minority groups at all levels of postsecondary education. (See Exhibits 8A-8E and 9A-9E.)

- Patterns of degrees awarded to minorities between 1976-77 and 1980-81 are markedly different from the overall pattern in New Mexico. Each minority group has a unique pattern. (See Exhibit 10.)

- In summary, the greatest population growth in the next twenty years will take place among the minority populations, whose rates of postsecondary educational attainment and socioeconomic status have been low historically.

# Exhibit 1

# Population Growth, 1960 to 1980, and Three Projections, 1990 to 2000

## —New Mexico—

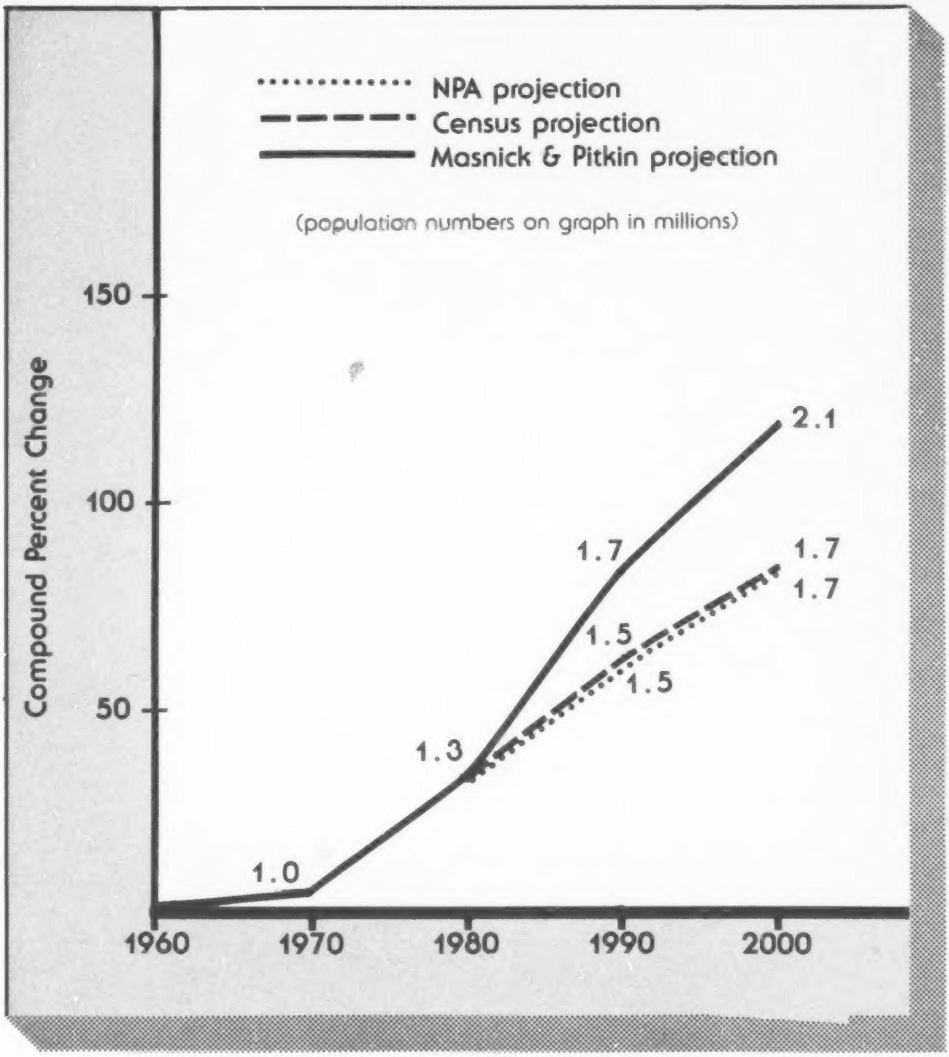
This exhibit shows the actual percentage growth in New Mexico's population from 1960 to 1980. The dotted, dashed, and solid lines represent three different population projections for 1990 and 2000. These projections are based on mathematical calculations of trends evident today. They do not take into account economic or social factors that may cause the growth rate to accelerate or to slow.

- New Mexico's population is projected to reach 1.7 million to 2.1 million by the year 2000, up from 1.3 million in 1980. The growth from 1980 to 1990 is estimated to be approximately 18 to 31 percent, and estimates of the overall change from 1980 to 2000 range from 30 to 54 percent.
- Over the last three decades, New Mexico has witnessed one of the sharpest reversals in migration patterns in the country. From an overall out-migration in the 1960s, the pattern shifted to a fairly large in-migration in the 1970s (Masnick and Pitkin, 1982). It was the ninth fastest growing state during the 1970s. The Bureau of Census predicts that the state will be the thirteenth fastest growing state during the decade of the 1980s (Robey and Russell, 1983).
- More than one-half of the population growth from 1970 to 1980 can be attributed to in-migration (Masnick and Pitkin, 1982). Many of the people migrating to New Mexico are young adults, who have attained or are approaching those years in which they will be starting families.

## Exhibit 1

## Population Growth, 1960 to 1980, and Three Projections, 1990 to 2000

## —New Mexico—



**Sources:** Robey and Russell, 1983; U.S. Bureau of the Census, 1970 and 1980; Masnick and Pitkin, 1982.

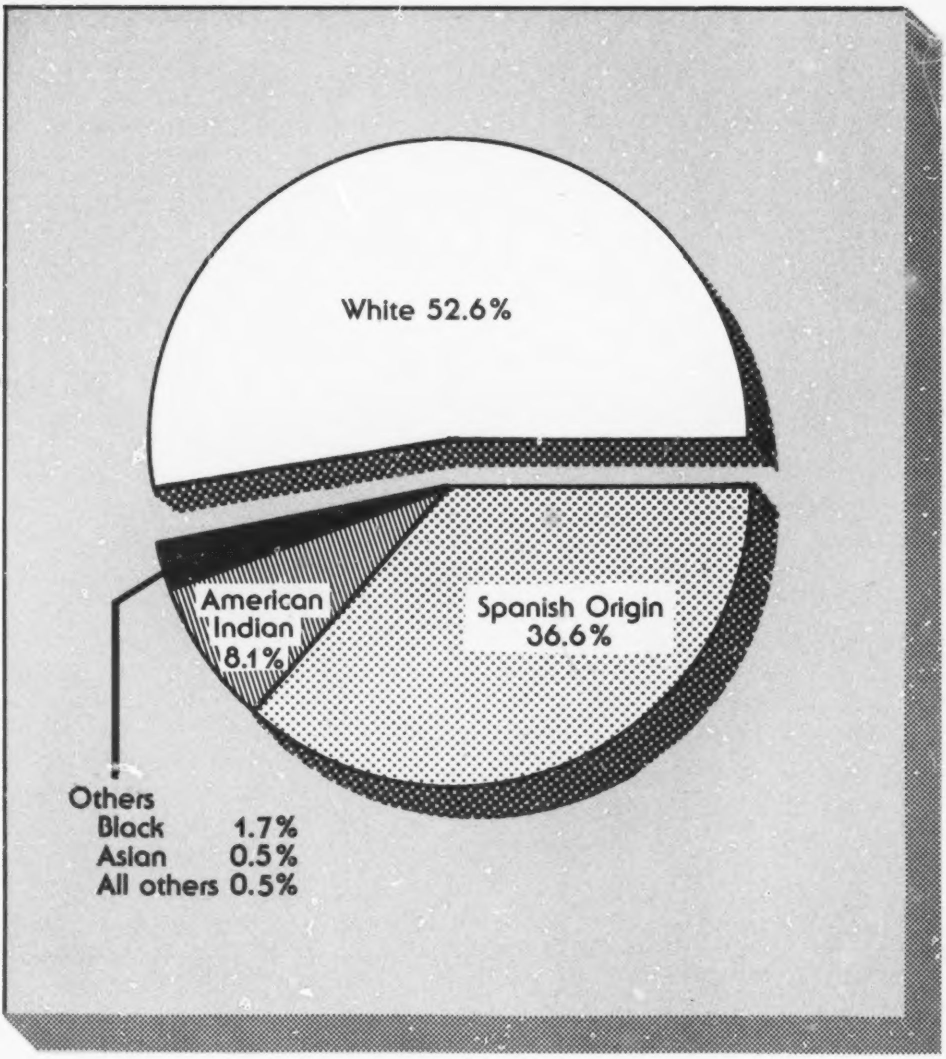
**Note:** The Masnick and Pitkin projections are plotted as found in their report. Projections for 2000 from the National Planning Association and the Bureau of the Census are estimates calculated by regression analysis using actual population figures from the 1960, 1970, and 1980 censuses and the 1990 projections.

# Exhibit 2
# Population by Race and Spanish Origin, 1980
# —New Mexico—

Exhibit 2 presents the proportions of racial and ethnic groups in the 1980 population in New Mexico. Since the data collected on race and Spanish origin in 1970 and 1980 are not comparable, it is not possible to make an accurate comparison between the two censuses.

- New Mexico's largest minority group is the Spanish-origin population, 36.6 of the state's population. This is the highest percentage of people of Spanish origin in the United States (American Demographics, 1983).
- Albuquerque had the twentieth largest metropolitan Spanish-origin population in the country in 1980, nearly 155,000. Las Cruces ranked forty-fourth with over 50,000. In percentage of Spanish-origin population, Las Cruces ranked fifth with 52 percent and Albuquerque eighth with almost 39 percent (American Demographics, 1983).
- Blacks constitute 1.7 percent of New Mexico's population, American Indians 8.1 percent, Asians 0.5 percent, all others 0.5 percent. New Mexico's American Indian population is the fourth largest in the nation with nearly 105,000 and is the second largest in proportion (Kaufman et al., 1983).

## Exhibit 2
## Population by Race and Spanish Origin, 1980
## —New Mexico—



**Source:** Kaufman et al., 1983, Table 21 and 23

# Exhibit 3

## School and College-Age Population by Race and Spanish Origin, 1980 (Actual) and 2000 (Projected)

## —New Mexico—

This exhibit shows the distribution of people of school age by race and Spanish origin for 1980 and a projection for the year 2000. The projection is based on a regression analysis of age cohorts from the 1980 census. Because the percentages of Blacks and Asians in New Mexico are so small, they have been included in the All Others category in Exhibit 3. Blacks constitute between 1.9 and 2.3 percent of the population groups aged 0-29, and Asians constitute 0.4 to 0.8 percent of the same groups. The projections do not show any trends toward substantial increases among these racial groups between 1980 and 2000.

- Exhibit 3 shows that the Spanish-origin population tends to be highly concentrated in the younger age groups. Although people of Spanish origin constituted 36.6 percent of the total population of New Mexico in 1980, they accounted for 44.6, 44.3, and 43.9 percent respectively of the three youngest age groups.

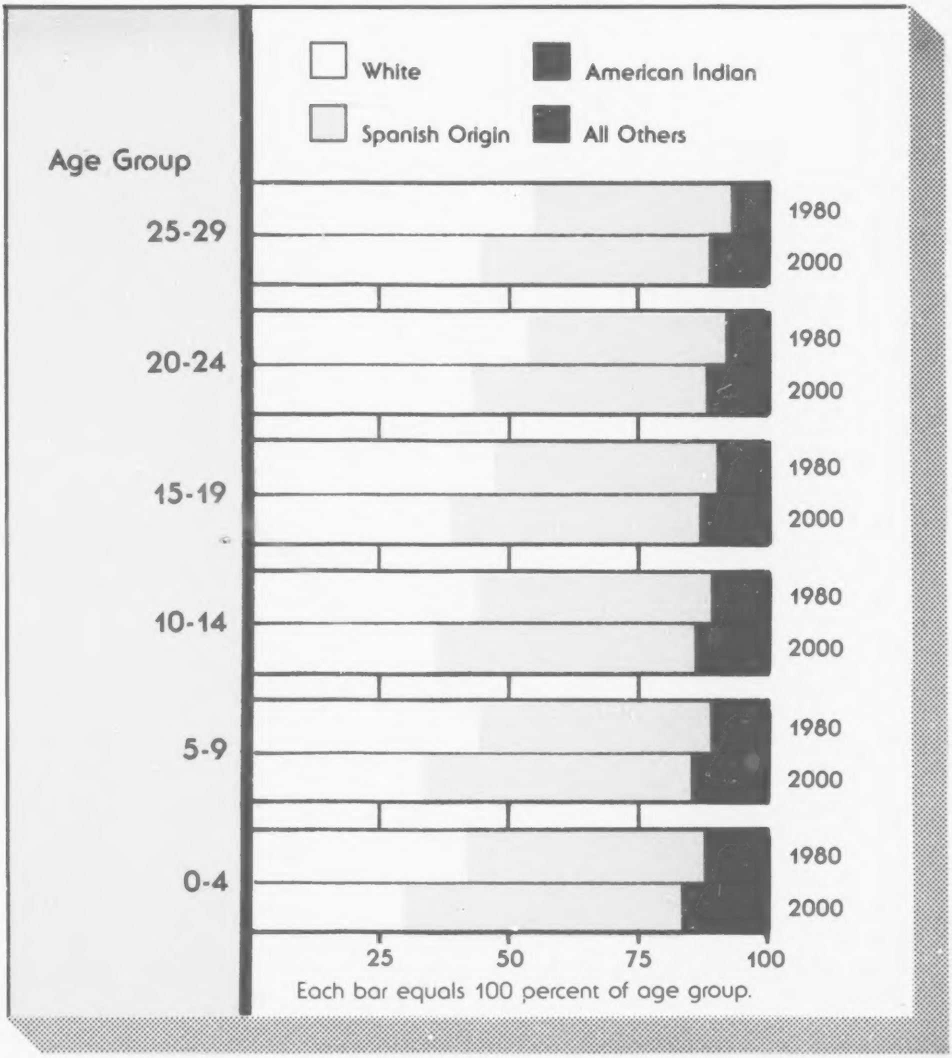
- By the year 2000, children of Spanish origin are projected to account for 53.3, 51.5, and 49.7 percent respectively of the three youngest age groups.

- While the numbers of Black, Asian, and American Indian children will not be as large as the Spanish-origin group, the percentages of racial minority children in the youngest age groups are expected to rise steadily. By the year 2000, it is estimated that approximately 16 percent of the children below age 15 in New Mexico will be American Indians.

## Exhibit 3

## School and College-Age Population by Race and Spanish Origin, 1980 (Actual) and 2000 (Projected)

## —New Mexico—



**Source:** Kaufman et al., 1983, Tables 20 and 22

**Note:** The All Others group includes the Black and Asian populations. Blacks constitute between 1.9 and 2.3 percent of the state population of the various age groups, Asians between 0.4 and 0.8 percent, and others between 0.1 to 0.5 percent. There are no data to suggest that the Black and Asian proportions of the various age groups will be increasing between 1980 and 2000.

# Exhibit 4

# Educational Attainment by Race and Spanish Origin of Persons Aged 25 and Over, 1980

## —New Mexico—

Exhibit 4 shows the proportions of the population aged 25 and over that have completed various levels of education. As the levels of educational attainment rise, the proportions of the population reaching those levels decrease. The differences in attainment among racial and ethnic groups are striking. It must be emphasized that school attainment of New Mexico adults in 1980 does not necessarily reflect what is taking place among the present generation of students in school, but the educational attainment of parents has been shown to affect the educational choices of their children.

- In 1980, New Mexico had the fifteenth highest proportion in the nation (17.3 percent) of college graduates in its population aged 25 or older and the twenty-third highest percentage of high school graduates (61.3 percent) (American Demographics, 1982).

- Only about one-half of the Spanish-origin and American Indian population aged 25 and over had completed high school in 1980, compared with approximately three-quarters of Whites and Asians and 63 percent of the Blacks in the same age group.

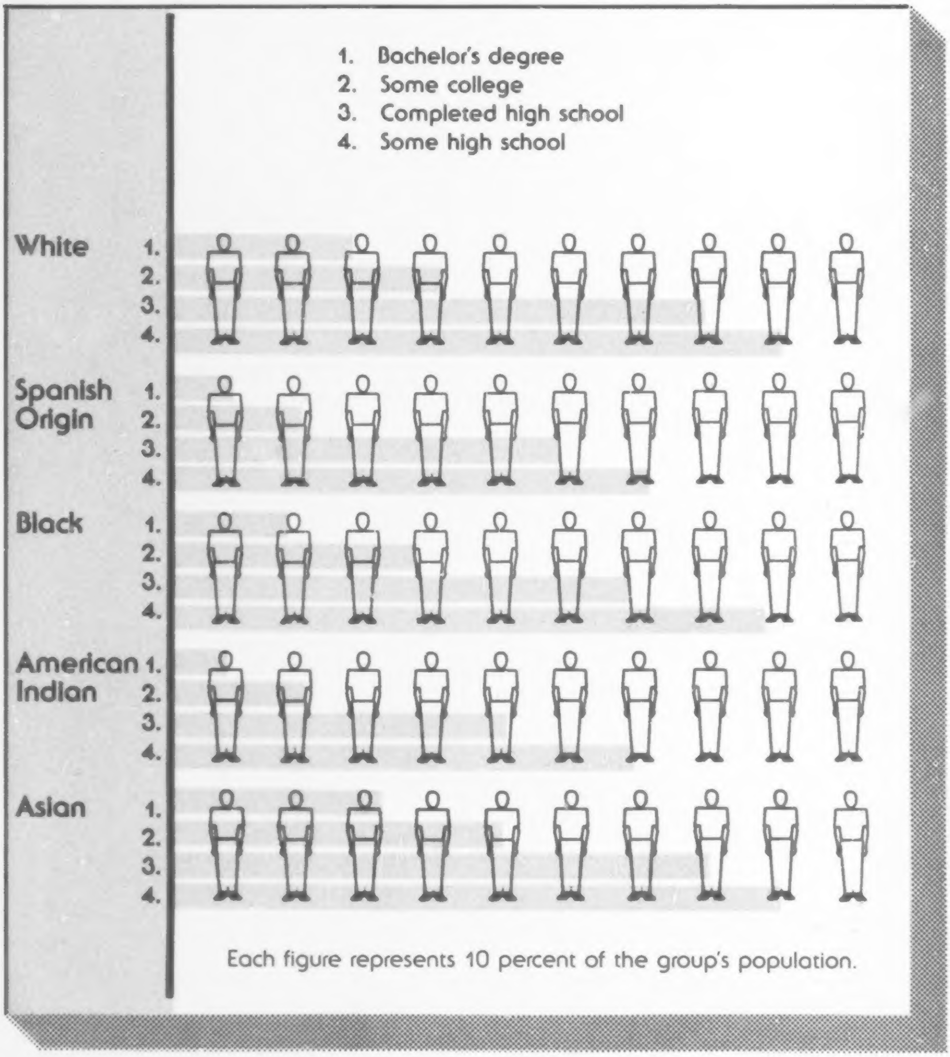
- Approximately 39 percent of the White, 30 percent of the Black, and 55 percent of the Asian population had completed some college compared with 17 percent of the Spanish-origin population and 18 percent of the American Indians.

- The disparity in educational attainment is most striking at the bachelor's degree level or higher. In 1980, 20 percent of the White population and 29 percent of the Asian population had completed at least a bachelor's degree, compared with 10 percent of the Blacks, 7 percent of the Spanish-origin population, and 5 percent of the American Indians.

## Exhibit 4

## Educational Attainment by Race and Spanish Origin of Persons Aged 25 and Over, 1980

## —New Mexico—



**Source:** Kaufman et al., 1983, Table NM-4

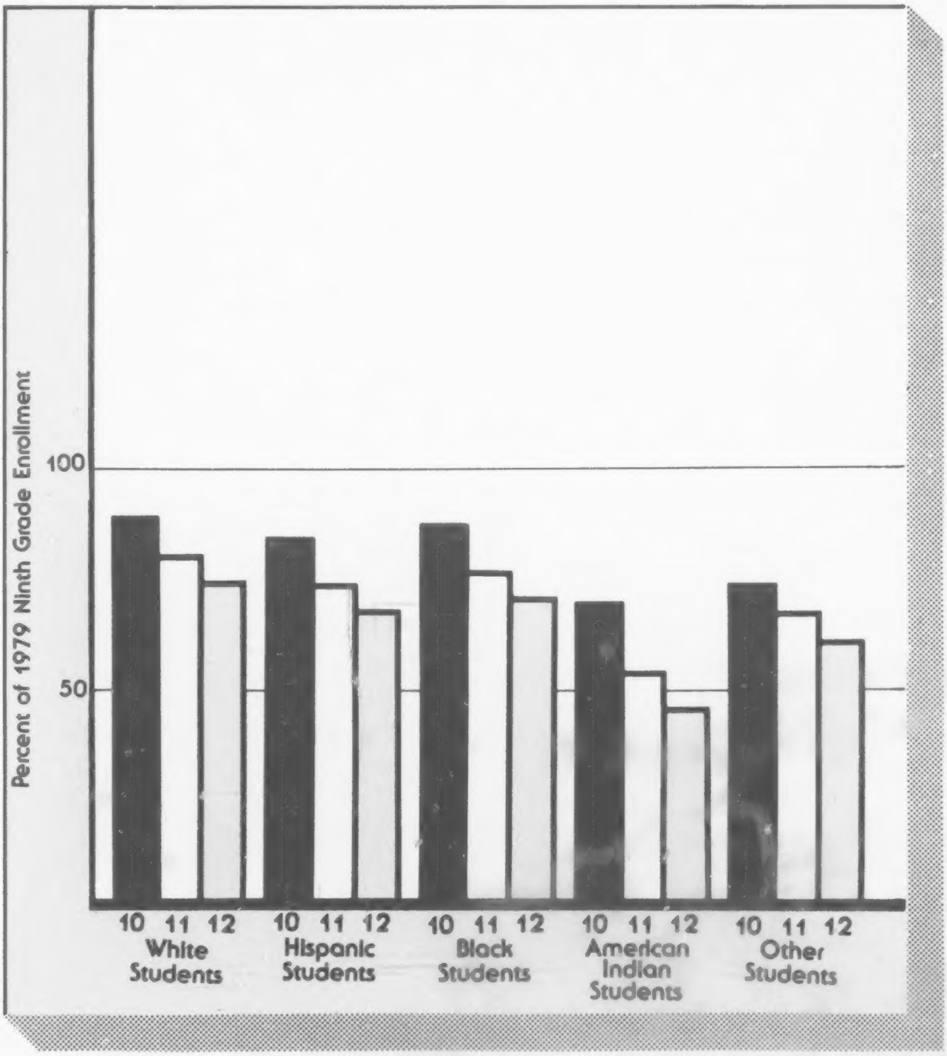
# Exhibit 5

# Persistence in High School of Ninth Graders, Fall 1979 to Fall 1982 (Public Schools Only) —New Mexico—

Exhibit 5 presents the persistence of high school students by race and ethnicity. The bars represent the percentages for each racial or ethnic group of ninth graders in 1979-80, who were tenth graders in 1980-81, eleventh graders in 1981-82, and the twelfth graders in 1982-83 remaining in school. The Other category, which is very small numerically, includes all students who did not identify themselves as "Anglo, Hispanic, Black, or Native American." Data on graduation rates are not available. Please note that this exhibit presents information that is substantially different from that presented in Exhibit 5 in the other publications in this series. These data are true rates of persistence derived from actual dropout rates, as opposed to implied rates of persistence derived from class progression ratios as in the other publications.

- This exhibit shows that minorities have higher dropout rates than Whites. Hispanics and Blacks in New Mexico have somewhat higher dropout rates than Whites, but the American Indian and Other populations have much higher dropout rates than the other three groups (Cavatta, 1980, 1981, 1982, 1983).
- The number of Hispanic high school seniors in 1982 represented 67 percent of the number of ninth graders three years earlier as opposed to 74 percent for Whites and 70 percent for Blacks (Cavatta,. 1980, 1981, 1982, 1983).
- The American Indian and Other retention rates are substantially lower than those for White, Hispanic, and Black students. Only 45.4 percent of the American Indian ninth grade class in 1979-80 remained to complete the twelfth grade in 1982-83, and the corresponding figure for the Other group was 61.3 percent (Cavatta, 1980, 1981, 1982, 1983).
- Thus, it is clear that a sizeable part of minority youth, relative to White youths, do not complete school and are not likely to enter college.
- These figures differ from nationwide figures, which show the "leakage" of minorities from the "educational pipeline." Nationally, 83 percent of White adult and school-age respondents in the Current Population Surveys from 1974 to 1978 completed high school compared with 72 percent of Black students and 55 percent of Hispanics (Astin, 1982).

## Exhibit 5
## Persistence in High School of Ninth Graders, Fall 1979 to Fall 1982 (Public Schools Only) —New Mexico—



**Source:** Cavatta, 1980, 1981, 1982, 1983

# Exhibit 6

## Percentage of 1980 U.S. High School Seniors Subsequently Enrolled in College

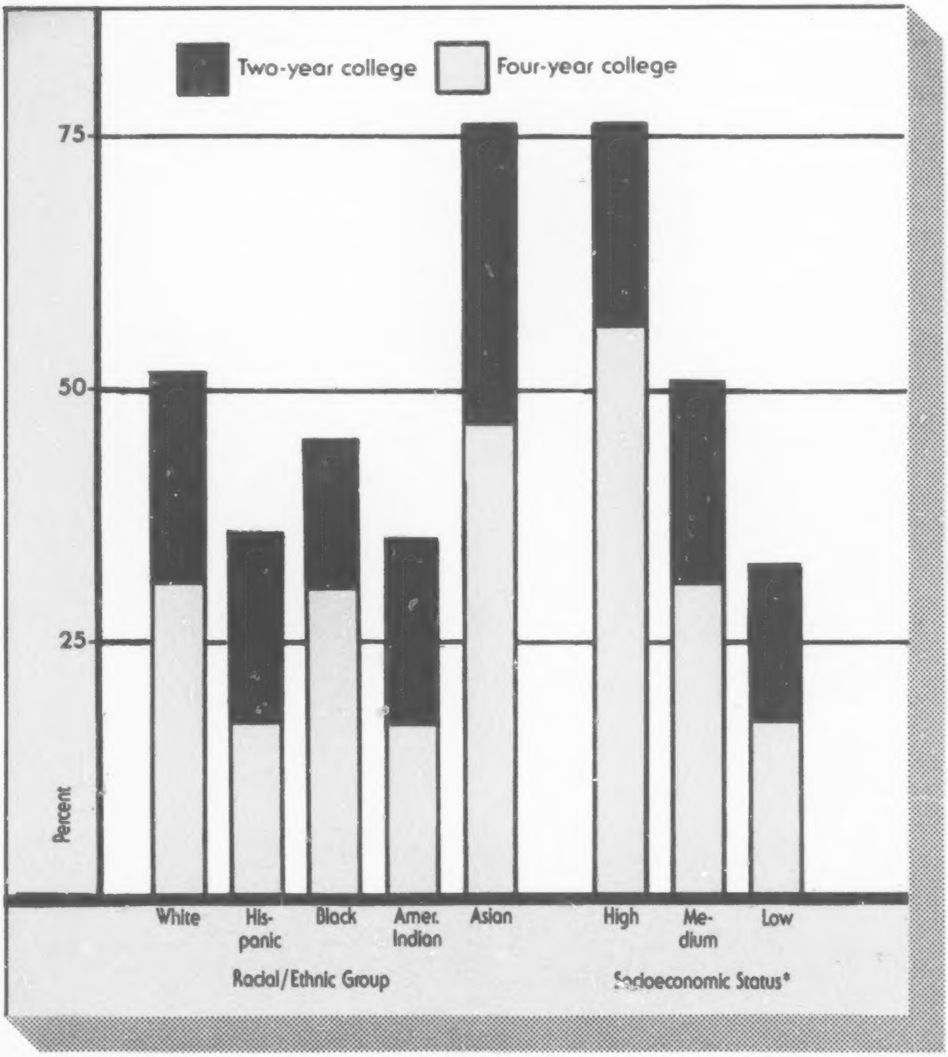
Taken together, Exhibits 6 and 7 illustrate the relationships among race and/or ethnicity, family income, and college attendance. Exhibit 6 displays the results of a national survey relating to the percentage of 1980 high school graduates who enrolled in college during the next several years (these data are not available on a state-by-state basis). It should be recognized that this was a national survey with limited generalization to the population of specific states. The survey did show that attendance patterns in the West were different from other regions. Although approximately the same percentage of western high school seniors attended college as seniors from other regions of the country, a greater percentage of students from the West attended two-year colleges than students from the other regions (28 percent in the West compared with 14 percent in the Northeast and 16 percent in the North Central states and the South).

- The five bars on the left of the exhibit show the college attendance patterns for the racial and Spanish-origin groups. White and Black students attended four-year institutions in approximately the same proportions, but a greater proportion of Whites than Blacks attended two-year institutions, which accounts for the greater overall college-going rate for Whites. Compared with the other groups, American Indian and Spanish-origin students attended two-year colleges in relatively large proportions and four-year colleges in smaller proportions. Attendance at both two-year and four-year institutions by students of Asian ancestry was far greater than for any other group.

- Attendance patterns vary according to socioeconomic status (SES), which is measured by a composite of parental education, family income, father's occupation, and household characteristics. High SES students are more likely to attend postsecondary educational institutions at all levels than those with lower SES.

## Exhibit 6

## Percentage of 1980 U.S. High School Seniors Subsequently Enrolled in College



**Source:** National Center for Education Statistics, 1984

*Socioeconomic status is measured by a composite of parental education, family income, father's occupation, and household characteristics.

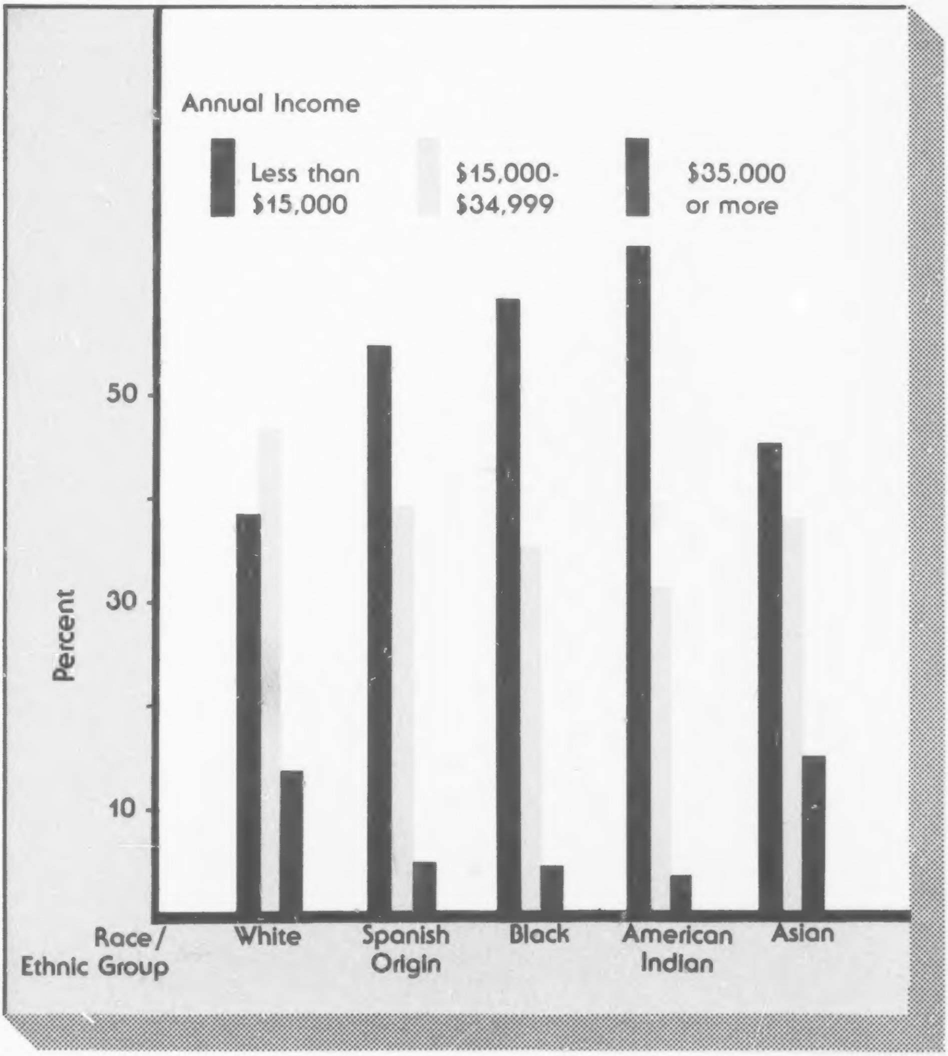
# Exhibit 7

## Family Income by Race and Spanish Origin, 1979 —New Mexico—

Exhibit 7 shows the percentages of the population with family incomes in three ranges: less than $15,000 per year; $15,000 to $34,999 per year; and $35,000 or more per year. The distribution for each racial or ethnic group is illustrated.

- o About 60 percent of the Black, 55 percent of the Spanish-origin, and nearly 65 percent American Indian populations come from families earning less than $15,000 per year, while only about 5 percent of those groups come from families earning $35,000 or more.
- o Family income levels for the White and Asian populations are similar: compared with the other racial or ethnic groups, relatively low percentages earn less than $15,000 and higher percentages earn more than $35,000.
- o These figures, when combined with the general information on student attendance patterns presented in Exhibit 6, demonstrate the important connection between economic status and education.

## Exhibit 7
## Family Income by Race and Spanish Origin, 1979
## —New Mexico—



**Source:** Kaufman et al., 1983, Table NM-6

# Exhibits 8A-8E
# Postsecondary Enrollment Compared with Representation in the Population, 1980
## —New Mexico—

Figures 8A-8E display the composition of postsecondary enrollments by race and ethnicity compared with each group's representation in the college-age population (aged 20-29). Each exhibit uses bars to portray the proportion of one racial or ethnic group enrolled in each of the four levels of postsecondary education. The bars are superimposed upon a background field representing that group's proportion of the college-age population. Thus, the reader can determine whether a group is well represented among postsecondary students in proportion to its representation in the population.

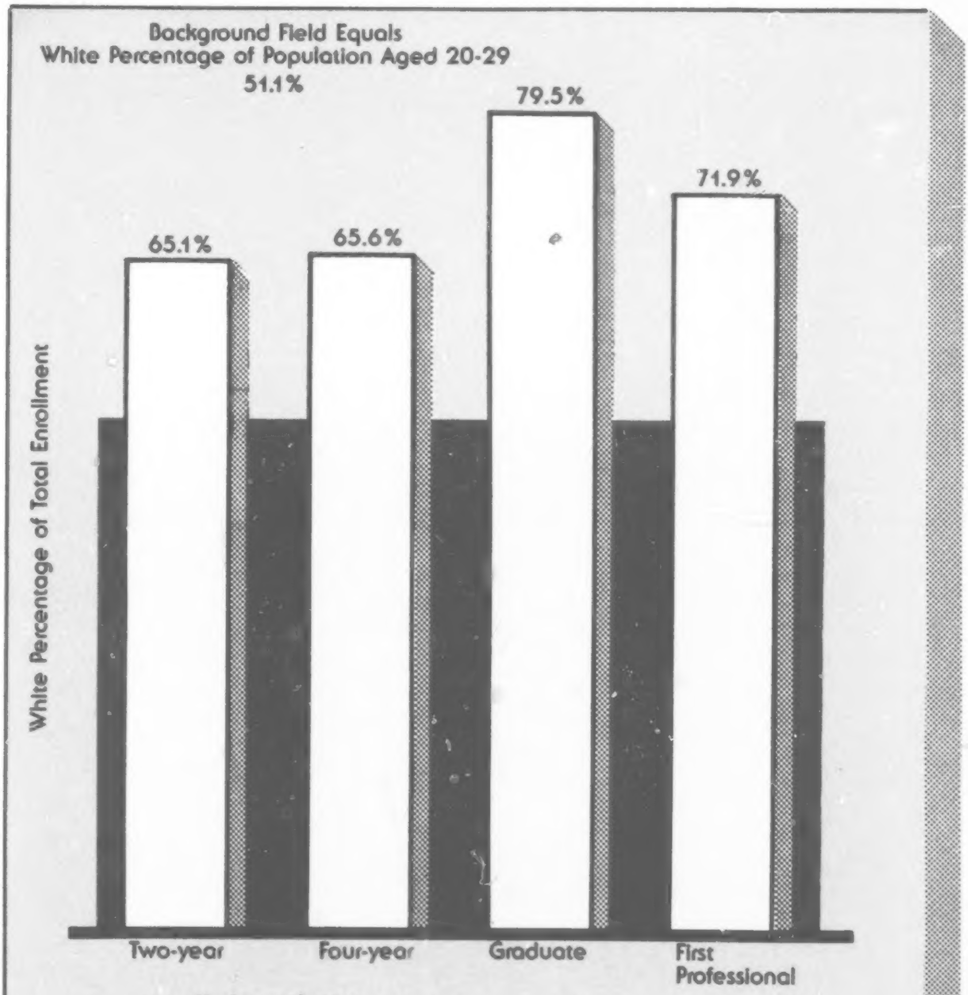
- The White proportion of enrollments at all levels of postsecondary education is greater than the White proportion of the college-age population in general. The White proportion of two-year college enrollment is substantially greater than the White share of the college-age population, and White representation increases at the four-year, graduate, and first professional levels.

- Hispanics and American Indians are underrepresented at all levels of postsecondary education, especially at the graduate level, where the proportions of Hispanic and American Indian enrollments are (respectively) one-half and less than one-fifth as large as the Spanish-origin and American Indian proportions of the college-age population in New Mexico. The proportion of enrollments at the bachelor's level for American Indians is slightly more than one-third the American Indian proportion of the college-age population in New Mexico.

- Blacks are well represented at the two-year and bachelor's levels, but the enrollments of Blacks at the graduate and first professional levels show significant underrepresentation--just over one-half the size of the Black proportion of the college-age population.

- Asians are well represented at all levels of higher education, particularly at the graduate and first professional levels.

# Exhibit 8A
# White Postsecondary Enrollments Compared with Representation in the Population, 1980
# —New Mexico—

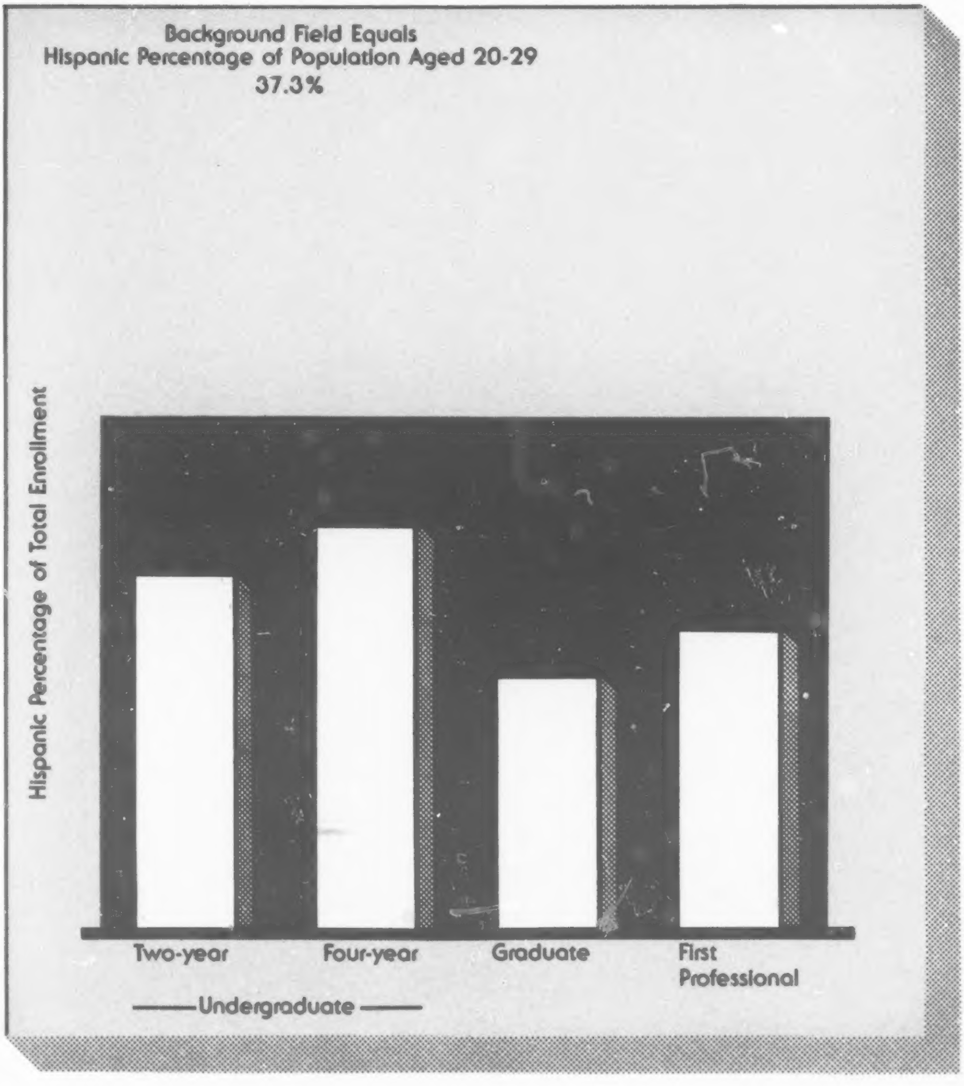


Source: Kaufman et al., 1983, Tables 7 and 22

## Exhibit 8B

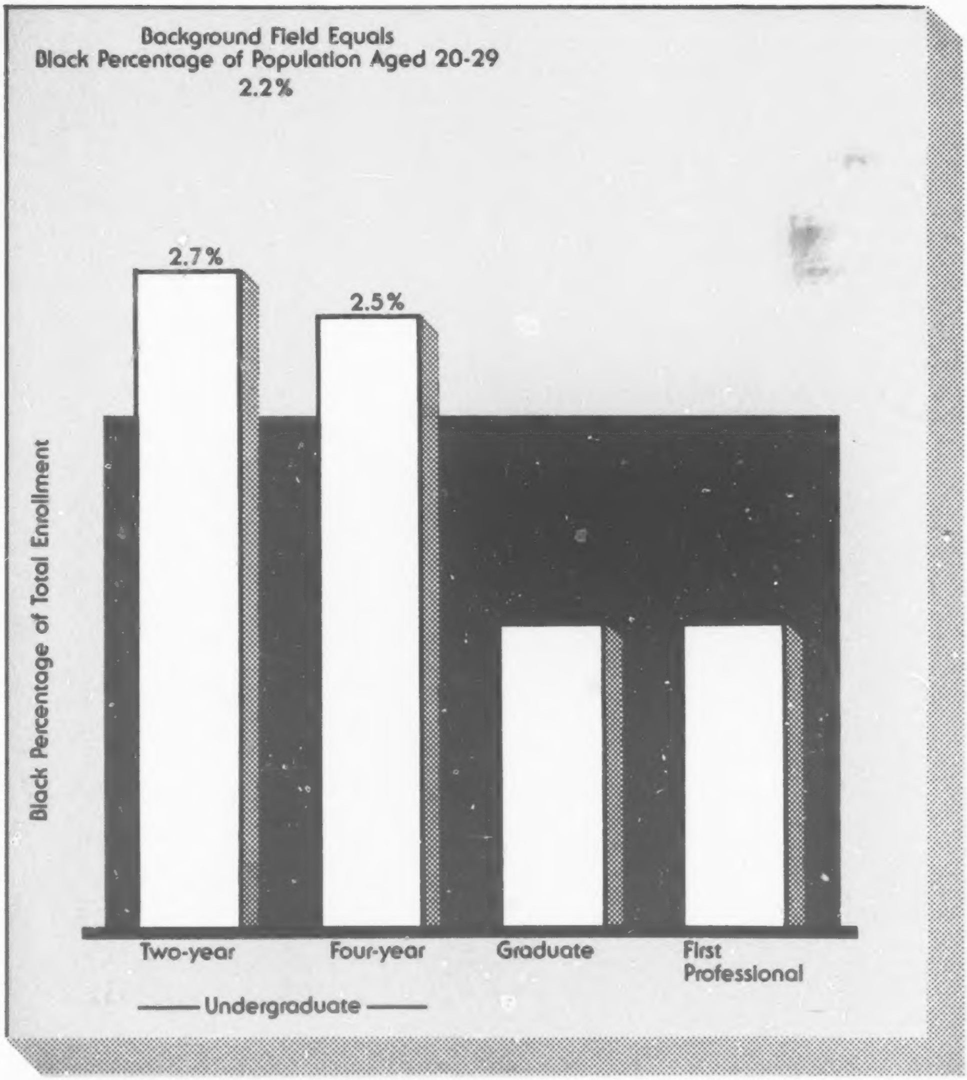
## Hispanic Postsecondary Enrollments Compared with Representation in the Population, 1980

## —New Mexico—



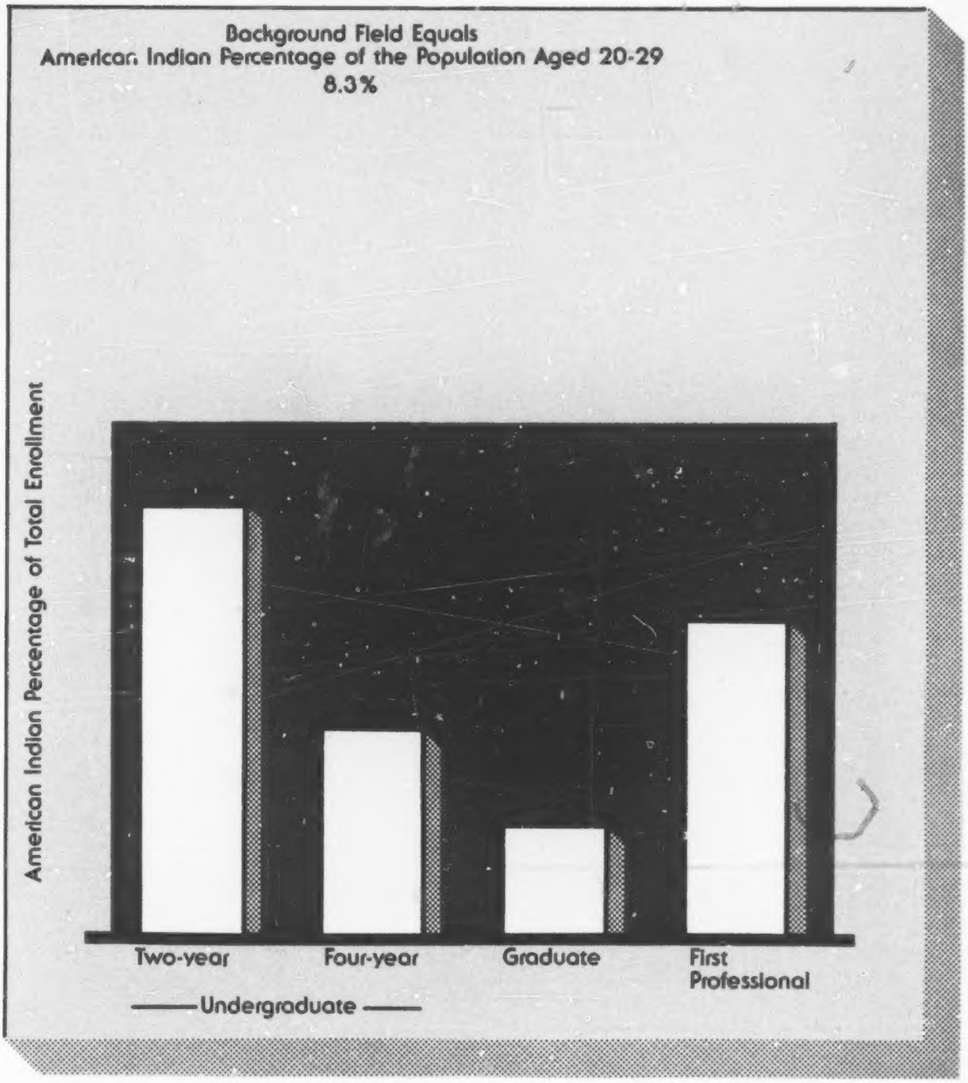
Source: Kaufman et al., 1983, Tables 7 and 22

# Exhibit 8C
# Black Postsecondary Enrollments Compared with Representation in the Population, 1980
## —New Mexico—



Source: Kaufman et al., 1983, Tables 7 and 22

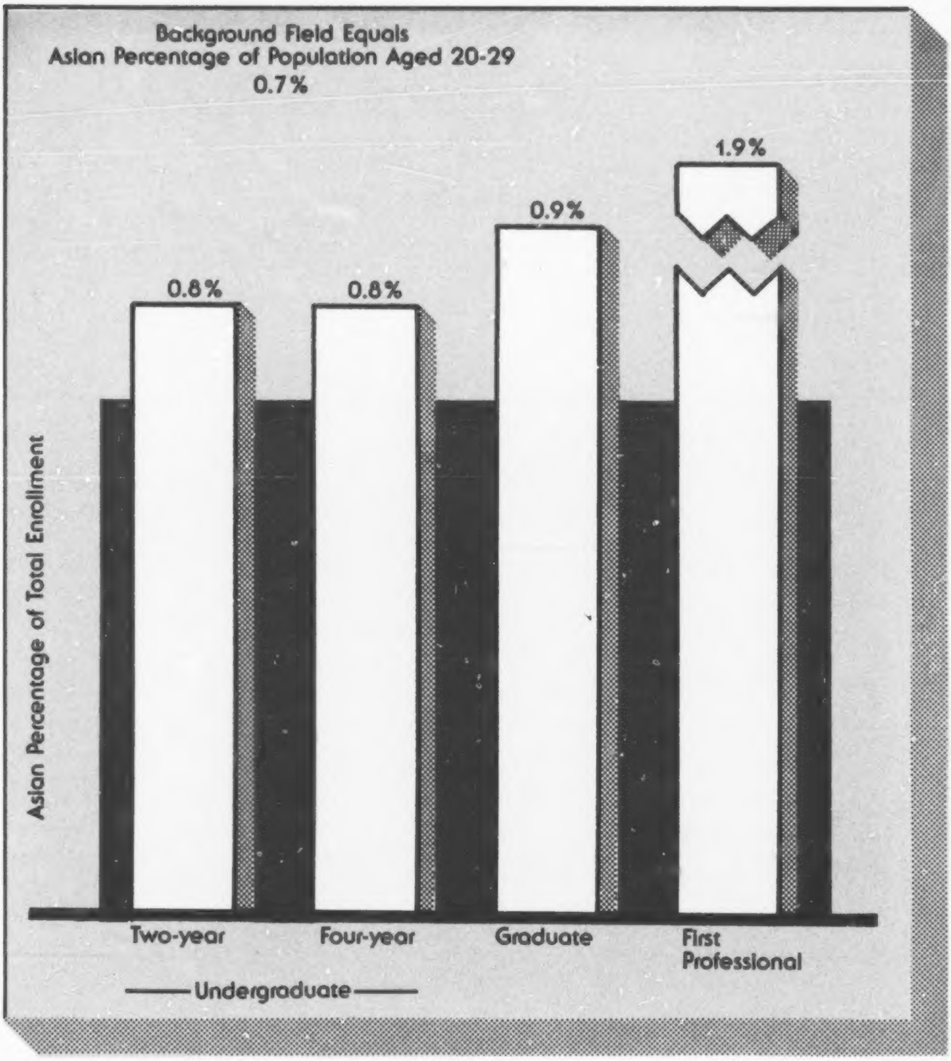
## Exhibit 8D
## American Indian Postsecondary Enrollments Compared with Representation in the Population, 1980
## —New Mexico—



Source: Kaufman et al., 1983, Tables 7 and 22

## Exhibit 8E

## Asian Postsecondary Enrollments Compared with Representation in the Population, 1980 —New Mexico—



Source: Kaufman et al., 1983, Tables 7 and 20

# Exhibits 9A-9E

# Degrees Earned in New Mexico Compared with Representation in the Population, 1980-81

Figures 9A-9E display the distribution among racial and ethnic groups of earned degrees at five levels (associate, bachelor's, master's, doctoral, and first professional) with each group's representation in the college-age population (aged 20-29). Each exhibit uses bars to portray the proportion of earned degrees by one racial or ethnic group in each of the five levels of postsecondary education. The bars are superimposed upon a background field representing that group's proportion of the college-age population. Thus, the reader can determine whether a group is well represented in earned degrees in proportion to its representation in the population.

- In general, when the proportions of degrees awarded to members of minority groups are compared with the proportions of college-age population, the overall pattern of underrepresentation of minorities is similar to that in enrollments, especially at the baccalaureate and higher levels.

- The White proportion of those earning degrees at all levels of postsecondary education is substantially greater than the White proportion of the college-age population in general.

- Hispanics are seriously underrepresented in earned degrees at all levels of postsecondary education. At the bachelor's degree level, the proportion of degrees earned by Hispanic students is 60 percent the size of the Spanish-origin proportion of the college-age population in the state. At the other degree levels, the proportions of degrees earned by Hispanic students is approximately one-half as large as the Spanish-origin proportion of the college age-population.

- Blacks are also underrepresented at all levels beyond the associate degree in New Mexico. At the two-year level, the Black proportion is approximately the same size as the Black proportion of the statewide college-age population, at the bachelor's level eight-tenths the size, slightly less than one-half the size at the master's and first professional levels, and approximately one-quarter the size at the doctoral level.

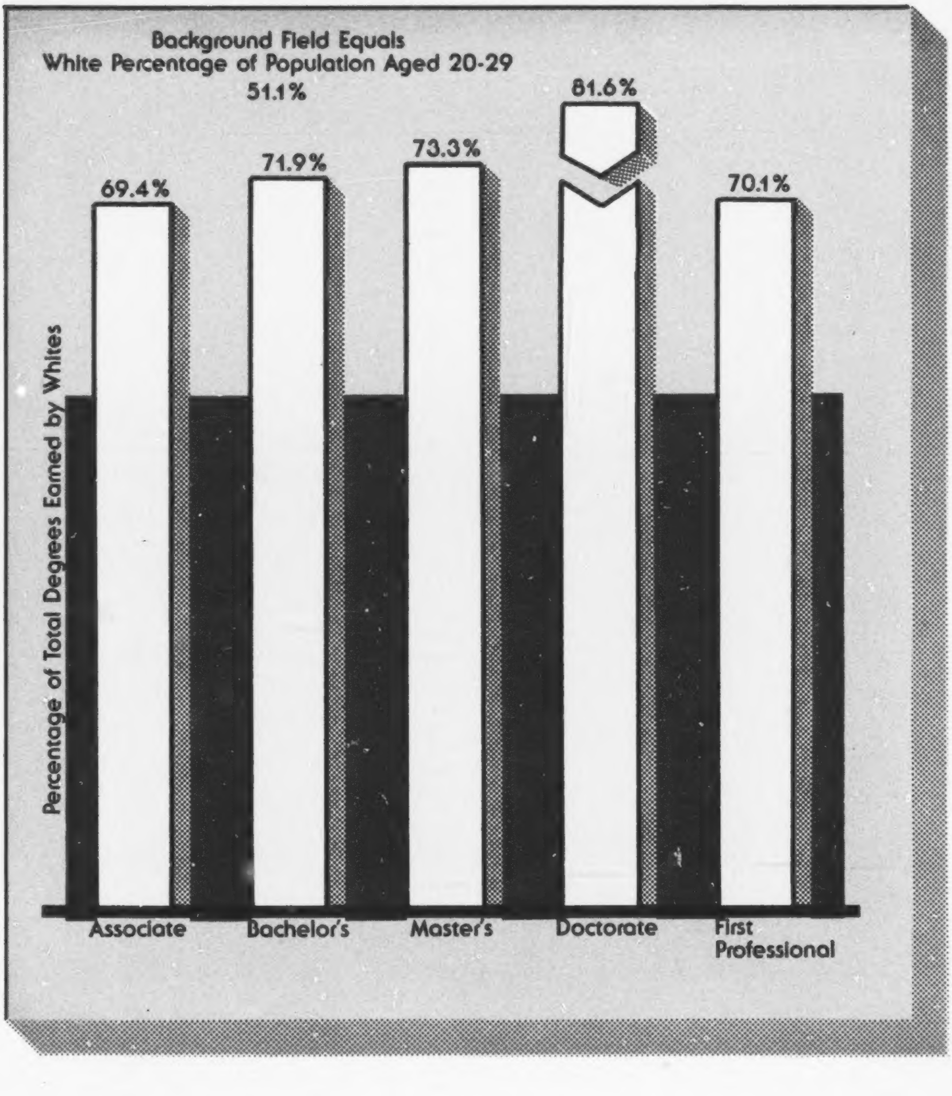
- At the associate degree level, American Indians are well represented, but there is severe underrepresentation at all other levels. At the bachelor's level, the proportion of degrees earned by American Indians is less than one-half the size of the American Indian proportion of the state college-age population, less than one-quarter the size at the master's level, less than one-eighth the size at the doctoral level, and slightly more than one-half the size at the first professional level.

- Asians are well represented at all degree levels except the doctoral. No doctoral degrees were awarded to Asians in 1980-81.

## Exhibit 9A

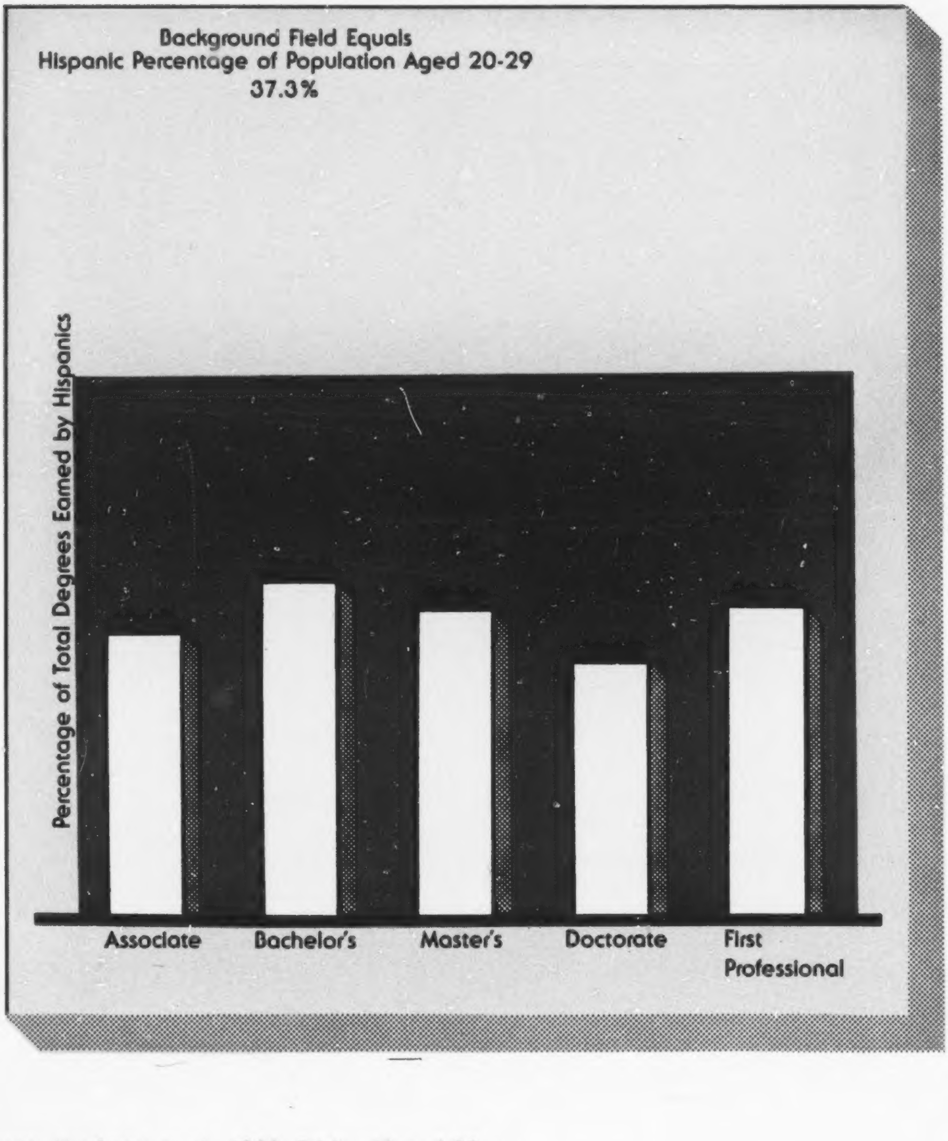
## Degrees Earned by Whites Compared with Representation in the Population, 1980

## —New Mexico—



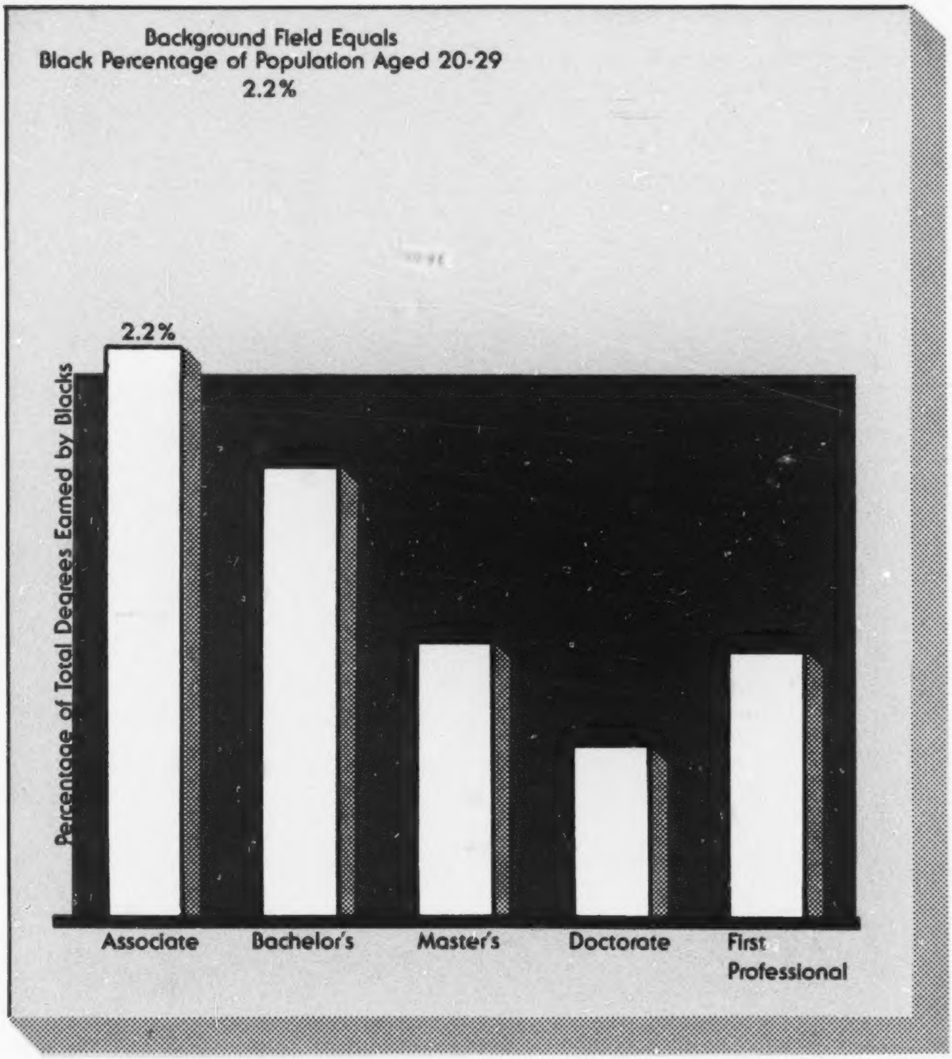
**Source:** Kaufman et al., 1983, Tables 12 and 22

## Exhibit 9B
## Degrees Earned by Hispanics Compared with Representation in the Population, 1980
## —New Mexico—



Source: Kaufman et al., 1983, Tables 12 and 22

## Exhibit 9C
## Degrees Earned by Blacks Compared with Representation in the Population, 1980
## —New Mexico—

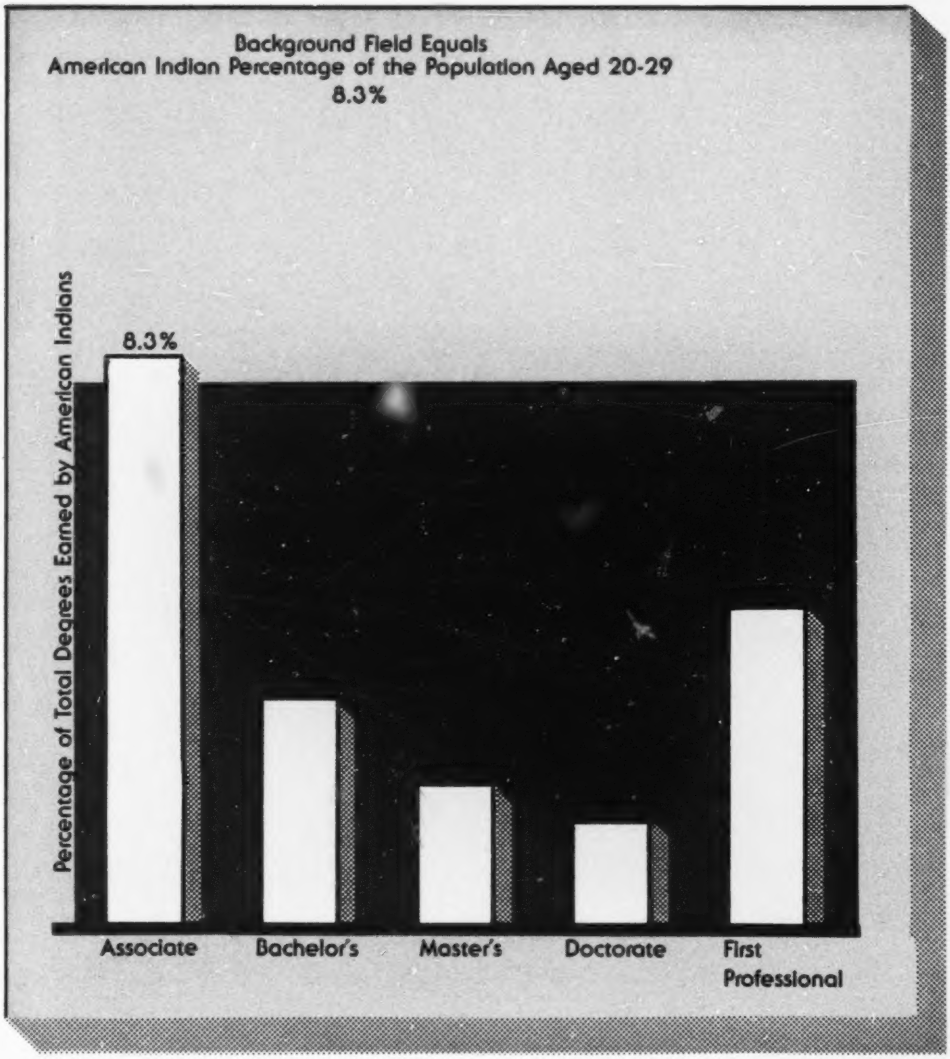


Source: Kaufman et al., 1983, Tables 12 and 22

## Exhibit 9D

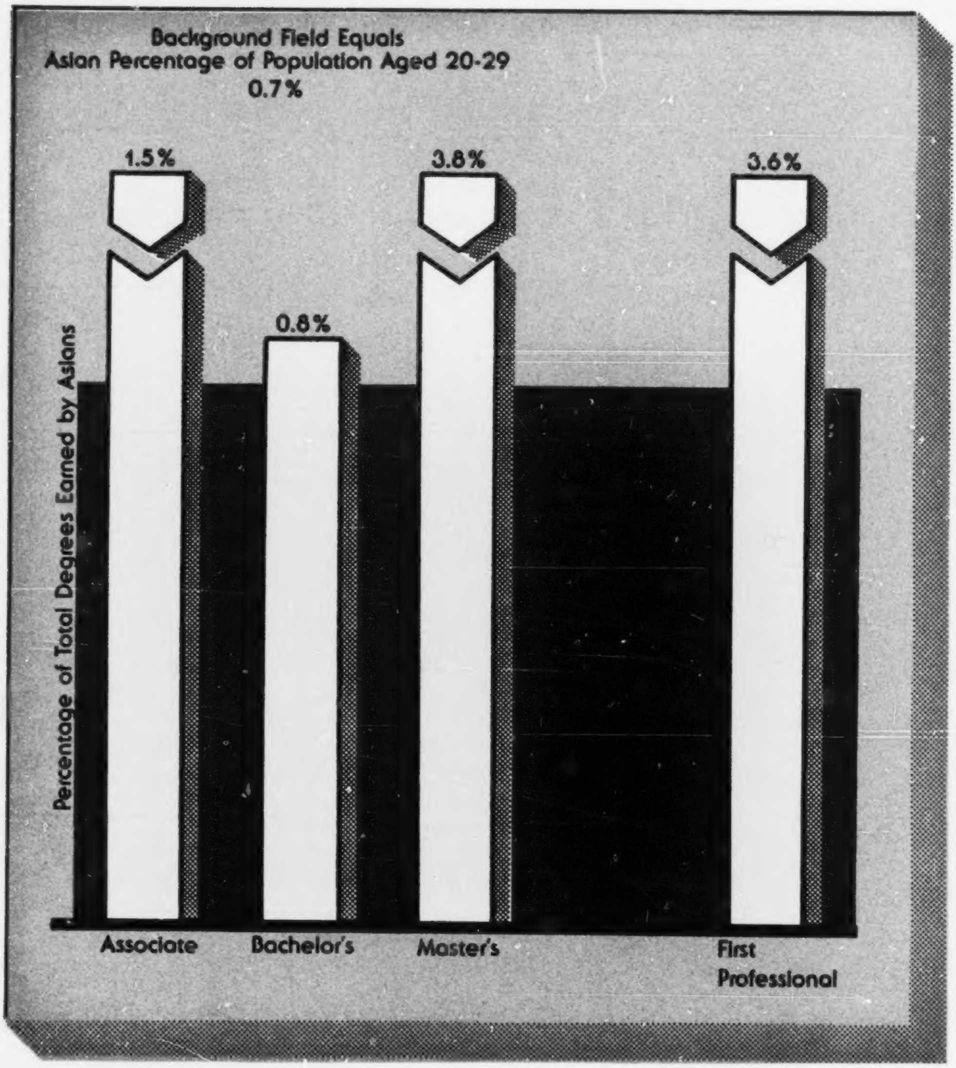
## Degrees Earned by American Indians Compared with Representation in the Population, 1980

## —New Mexico—



**Source:** Kaufman et al., 1983, Tables 12 and 22

# Exhibit 9E
# Degrees Earned by Asians Compared with Representation in the Population, 1980
## —New Mexico—



**Source:** Kaufman et al., 1983, Tables 12 and 20

## Exhibit 10

# Earned Degrees by Race and Spanish Origin, 1976-77 to 1980-81

## —New Mexico—

This table presents the number of degrees awarded at five levels (associate, bachelor's, master's, doctoral, and first professional) by racial or ethnic group. At the doctoral and first professional levels, interpretation is difficult because such small numbers of degrees are awarded to minority students that year-to-year fluctuations appear as substantial percentage changes.

- Overall, except for an increase of more than 28 percent in associate degrees, there has been relatively little change in the numbers of degrees awarded in New Mexico from 1976-77 to 1980-81.

- The increase in associate degrees awarded to Hispanics is slightly lower than the overall increase in the state, and most of the growth in associate degrees earned by Hispanics took place from 1976-77 to 1978-79. There was a growth of nearly 12 percent in bachelor's degrees earned by Hispanic students from 1976-77 to 1978-79 and a slight decrease from 1978-79 to 1980-81, compared with overall decreases during both periods at that level. At the master's level, Hispanics earned fewer degrees compared with a slight increase in the number of degrees overall. The number of doctorates awarded to Hispanics increased significantly during a period of overall decline. A modest increase in the numbers of first professional degrees earned by Hispanics kept pace with the overall increase.

- Black students earned substantially more associate degrees in 1980-81 than in 1976-77, but they earned far fewer degrees at the other levels. Overall, very few degrees are awarded to Blacks in New Mexico, so that small fluctuations from year to year cause large percentage changes.

- American Indians earned substantially more associate degrees and slightly more bachelor's and master's degrees in 1980-81 than in 1976-77. The production of doctoral and first professional degrees remained steady.

- In 1980-81 Asian students earned substantially more associate, bachelor's, master's, and first professional degrees than they did in 1976-77, but they received no doctoral degrees in 1980-81 compared with nine in 1976-77.

## Exhibit 10

# Earned Degrees by Race and Spanish Origin, 1976-77 to 1980-81

## —New Mexico—

| | Degrees Awarded 1976-77 | Degrees Awarded 1978-79 | Percent Change 1976-78 | Degrees Awarded 1980-81 | Percent Change 1978-80 | Percent Change 1976-80 |
|---|---|---|---|---|---|---|
| **State Totals** | | | | | | |
| Associate | 1,049 | 1,259 | 20.0 | 1,347 | 7.0 | 28.4 |
| Bachelor's | 4,693 | 4,604 | -1.9 | 4,543 | -1.3 | -3.2 |
| Master's | 1,696 | 1,710 | 0.8 | 1,750 | 2.3 | 3.2 |
| Doctorate | 166 | 158 | -4.8 | 165 | 4.4 | -0.6 |
| First Professional | 190 | 179 | -5.8 | 194 | 8.4 | 2.1 |
| **White Students** | | | | | | |
| Associate | 777 | 851 | 9.5 | 928 | 9.0 | 19.4 |
| Bachelor's | 3,503 | 3,342 | -4.6 | 3,239 | -3.1 | -7.5 |
| Master's | 1,188 | 1,203 | 1.3 | 1,238 | 2.9 | 4.2 |
| Doctorate | 129 | 131 | 1.6 | 133 | 1.5 | 3.1 |
| First Professional | 136 | 122 | -10.3 | 136 | 11.5 | 0.0 |
| **Hispanic Students** | | | | | | |
| Associate | 205 | 254 | 23.9 | 249 | -2.0 | 21.5 |
| Bachelor's | 914 | 1,022 | 11.8 | 1,004 | -1.8 | 9.8 |
| Master's | 364 | 343 | -5.8 | 338 | -1.5 | -7.1 |
| Doctorate | 18 | 20 | 11.1 | 27 | 35.0 | 50.0 |
| First Professional | 39 | 45 | 15.4 | 40 | -11.1 | 2.6 |
| **Black Students** | | | | | | |
| Associate | 18 | 39 | 116.7 | 30 | -23.1 | 66.7 |
| Bachelor's | 94 | 76 | -19.1 | 81 | 6.6 | -13.8 |
| Master's | 35 | 28 | -20.0 | 18 | -35.7 | -48.6 |
| Doctorate | 3 | 0 | N/A | 1 | N/A | -66.7 |
| First Professional | 6 | 3 | -50.0 | 2 | -33.3 | -66.7 |
| **American Indian Students** | | | | | | |
| Associate | 35 | 95 | 171.4 | 111 | 16.8 | 217.1 |
| Bachelor's | 139 | 114 | -18.0 | 146 | 28.1 | 5.0 |
| Master's | 27 | 41 | 51.9 | 31 | -24.4 | 14.8 |
| Doctorate | 2 | 1 | -50.0 | 2 | 100.0 | 0.0 |
| First Professional | 9 | 6 | -33.3 | 9 | 50.0 | 0.0 |
| **Asian Students** | | | | | | |
| Associate | 9 | 13 | 44.4 | 20 | 53.8 | 122.2 |
| Bachelor's | 20 | 29 | 45.0 | 34 | 17.2 | 70.0 |
| Master's | 8 | 16 | 100.0 | 64 | 300.0 | 700.0 |
| Doctorate | 9 | 4 | -55.6 | 0 | N/A | N/A |
| First Professional | 0 | 3 | N/A | 7 | 133.3 | N/A |

**Source:** Kaufman et al., 1983, Tables 12, 13, 14

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Western Interstate Commission for Higher Education. 1984. The data upon which Exhibit 5 is based was provided by the New Mexico Board of Education in response to a telephone request.